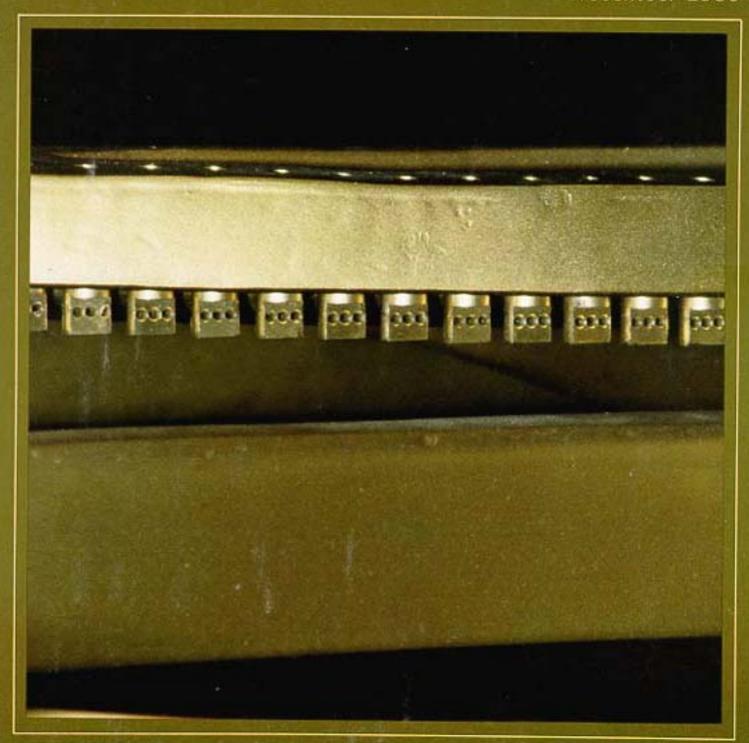
# Piano Technicians Journal

November 1986



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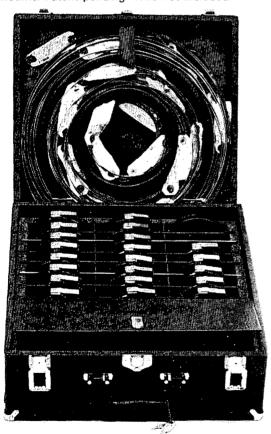
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#### PIANO TECHNICIANS JOURNAL

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# PRESIDENT'S PERSPECTIVE



M.B. Hawkins, RTT President

You Can Overcome Failure It's not whether you get knocked down. It's whether you get up again.

I'll bet you've heard those words before. The late Vince Lombardi said that and he was so right. We find situations on a daily basis which could be viewed as failures. In this case failure means you were not as prepared as you could have been — but what one needs to do is keep trying because you are never a failure until you completely give up.

In this field of piano technology and across our organization we are very fortunate. Not only do we have a means of constantly honing our skills by reading and attending the various functions that are available for our benefit, but at any time there is a particularly difficult situation, there is always someone to call. Asking questions is no crime, but a bridge to the solution you are seeking.

Here are a few things about failure we should remember:

l. To fail is not to be a failure — Your failure only proves that you are human. It means you tried and to try to accomplish anything is to risk failure. To completely avoid failing is to attempt nothing.

2. Once you've learned from your failures, forget them. If you continue to focus on the failure you will soon see nothing else. Build on your successes but learn from your failures.

3. Failure is never final — unless you let it be. Remember Edison? He failed thousands of times developing the electric light bulb. When he was asked if he was discouraged he always said, "No, I am well-informed on thousands of ways you cannot do it." Keep this in mind...the greatest failure in life is to stop trying.

As we move into the season of Thanksgiving, bear in mind the many opportunities we have to maintain that cutting edge and be thankful. We could be in any number of places around the world which would not allow us the freedoms we take for granted.

#### Self Image — Self Worth

A good self image is vital as it charts your course in life. I'm afraid, however, many of our members do not recognize their true worth. Expect people to recognize your value as a Registered Tuner-Technician, vour knowledge and your skills, and then work to deserve that respect and recognition. Your self image and your work habits go hand in hand. Change one and the other changes automatically. You have a responsibility to yourself and to your peers in P.T.G. to be the very best you can be.

Reaching a goal and achieving a level of expertise in the field of piano technology should be the beginning of setting forth a new goal. It can be a most delightful surprise if a few quiet moments are taken to look back at where you began, how you have worked and planned to achieve the skills and successes you have so far attained and then suddenly realize your true worth.

True worth would certainly include formal education in piano technology. For many, formal education means a school at which piano technology was studied, but when combined with what we call true worth, more must be taken into consideration. Many mistakes, many classes, many technical sessions and many, many hours in front of or indeed inside a piano should not be left out. Be sure to remember the numerous conversations with others including the "meetings after the meeting' that so many of us experience when we get together for chapter meetings. Add to the foregoing the invaluable discussions with our associates in the hotel coffee shop or lobby while attending a Guild conference all add up to your "formal education" which so many of us fail to place enough of a value on. Too often because the knowledge and information comes to us from a not-so-formal setting, we tend not to recognize its true worth and thus we fail to evaluate our Continued on next page

#### Overcome . . .

personal worth objectively.

The following excerpt is from a book entitled "Thoughts To Live By" authored by Maxwell Maltz, who also wrote the best seller "Psycho-Cybernetics."

Your Untapped Wealth

It is a tragedy that throughout history so few people have fully exploited their potentialities. Yes. almost all people have rich.

untapped areas of talent.

Don't be a "doubting Thomas." Follow the example of another "Thomas," Thomas Jefferson, America's third president. Thomas Jefferson's accomplishments are almost beyond belief. His confidence in his powers must have been extraordinary. In the process of serving out two full terms in our nation's highest office, he negotiated the famed Louisiana Purchase, which some historians have called the outstanding bargain in American history. This was preceded, of course, by his famed drafting of our great Declaration of Independence.

Jefferson's other achievements as a statesman are too numerous to mention. Few American statesmen in our history have done so much; it is doubtful if any have done more.

The astonishing quality about Jefferson was his full use of his creative powers in other fields as well. A married man with two daughters, he was the president of the American Philosophical Society, established the University of Virginia, and supported the first American scientific expeditions. He was also a top-flight architect, who designed not only his own home but those of friends.

I am not suggesting that you are in any way a failure if you cannot measure up to such monumental achievements as those of Thomas Jefferson. My message is simply that you should reach out to the world with your full capabilities, whatever they may be, that you should emulate Jefferson in utilizing your resources instead of blocking them.

Here are the words of William Hazlitt, "He who undervalues himself is justly undervalued by others."■





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# FROM THE EXECUTIVE DIRECTOR



Barbara Parks Executive Director

## Gathering Information

It's sort of an axiom in the survey business that if you send out a questionnaire, you can expect to hear from about 10 percent of your respondents. That's assuming you have done everything right in constructing and mailing your questionnaire—the "right" color envelope, the "right" wording, the "right" offer.

It's a bit like voting. Even though the question may be of vital importance, the assumption is that only a few people care. And only a few of those care enough to do what it takes to be counted. Association members generally provide a slightly better response because they were interested enough to join in the first place. Even then, though. the science of surveying and audience research is based on predicting general opinion and fact based on a relatively tiny sample. The larger the sample, the more accurate the generalizations.

When we recently sent out a questionnaire on supplemental major medical insurance coverage marketed through the Guild, we expected a higher-than-normal response. After all, insurance is a burning issue throughout the association industry. In one form or another, insurance has been discussed at every Board meeting in recent memory, and the Board has been very concerned that Guild members should be able to obtain the best coverage possible.

The Monday after the questionnaires were mailed, the deluge began. We received more than 400 responses on the first day alone, more than 10 percent of the total right there. The trend has continued. As this is written, we estimate that we have received responses from

three or four times that number.

We're now in the process of tabulating the results. Generally speaking, respondents' names, addresses, ages and other personal data are important only from a statistical standpoint, although names of those who wrote in a request for more information will be forwarded to Sunset Insurance Associates for a response. Those who took the time to write comments on their questionnaires can be sure that those responses will be brought to the attention of the Board and Home Office staff.

As we enter the responses into our computer, a few trends are starting to appear: the average age of respondents appears to be approximately 50, with 10 percent of them women. Almost 85 percent of those entered so far are Registered Technicians. And almost 15 percent have no medical insurance at all. Of course these are early figures. We'll print a more accurate summary in a future issue.

This survey is only the beginning. In his first President's message, Marshall Hawkins said, "1986-87 will be highlighted with much gathering of information...As I see it, information- gathering and efficient communication are the keys that will unlock future activities." The more accurate our information, the better the services that can be provided.

It's obvious that there is a great deal of concern about this issue as well as a willingness to work to build a more effective Guild. We will ask further questions about this and other issues in the months to come. Your continued help will benefit all of us.



At Kawai, the tuner's hands and ears alone can determine the final "rightness" of a piano in the final tuning process.



## Economic Affairs

David J. Barr Economic Affairs Committee

## Psychology of In-Home Service

How many of you became involved with piano technology with the idea that this could be a profession through which you may be able to earn a decent living, have a reasonable amount of independence, garner respect, and perform a service of value? When did it occur to you that you have become a business person, solely responsible for your own success or failure? If you have attended any of the courses related to small business, you are aware that the first objective of any business is simple make a profit. On the one hand, we could be purely idealistic and romanticize our business. On the other, we could be purely practical, concerned only with the "bottom line." I believe there is a balance that needs to be developed between the two extremes. Looking at some of the psychology of our "in-home" service business, perhaps I can demonstrate that the idealism and romanticism of our profession can serve us well in a very practical business sense.

Customer relations involve a healthy knowledge of the psychology or the study of human nature. This happens to be a hobby of mine. I enjoy reading books on the subject. I also generally like people and particularly enjoy meeting them in their homes. It is here, I believe, that one can see the most of what another person values in his or her life. Because of this fact, though, it is also here that the other person is most vulnerable. There is a sense of privacy and protection that is universally connected to a person's home. This is terribly important to realize for those of us who work in these homes.

How do you feel when a stranger comes to your door to service your broken washing machine? A bit uncertain I am sure. Your private values are being exposed. You are open to outside judgment and possible rejection. You also have to evaluate the service person's abilities and your own sense of comfort with him or her. Your customers will have the same sense of apprehension the first

time you arrive at the door. You are judging and are being judged throughout your entire visit in someone's home. The first moments as you are greeted and enter the home are the most awkward and important for setting the stage for this and future service calls. My one tip for you this moment, simply stated, is do whatever you have to do so that you are not judging your customer's set of values in a negative light. More to the point, look for positive values to reinforce the relationship between your customer and yourself.

Here is a list of a few of the categories a customer will be using to evaluate you: (If you are honest with yourself, I think you will recognize these are the same things you are observing in your customer as well) appearance, personality, discipline, sense of caring, patience, skills, confidence, energy, encouragement, lifestyle, vulnerability, integrity, respect, educational level, image, etc. For example, if you value yourself you will always be reasonably well-groomed. If you like people it will be evident in your personality. If you like what you do, your work will reflect a sense of extra energy. If you care, it shows. These may merely be little anecdotes, but they generally hold true.

This is the sort of business that interconnects very strongly with your own personal beliefs or values. For instance, have you justified in your own mind the need for pianos and good technicians? If not, your attitude will reflect that this is just another job to you. It is difficult to conceive that a refined customer, the kind of customer you really want, could put much confidence in your abilities. Conversely, the better your reasoning and the stronger your conviction, the more likely it is that this same customer will place a higher value on you and his own piano. His or her willingness to properly maintain the piano at a higher cost is directly related to this sense of value which can be instilled. I believe that it is part Continued on next page

## Psychology . . .

of our business to teach this sense of importance and value as a part of a regular service call.

Finally, then, what really is the value of an acoustic piano? Could it be self-satisfaction through accomplishment, joy, pleasure, personal enrichment, healthy challenge, self-worth, a language to express emotions and countless other complex feelings, the ability to concentrate. satisfying sound that can cry or shout or speak peacefully, coordination, inspiration? It could be many, many things. Some beyond words. Acoustic pianos are for people who don't want to be the same as everyone else. They don't want the usual, dull. ordinary sameness that is too often in vogue. They don't want instant gratification that ultimately leads to boredom. They want their lives to have a sense of meaning and value. One note on a fine, properly cared-for instrument can sound so many different ways. The complexity of your feelings can couple with the complexity of the physics of an acoustic piano so that there is deep communication. This can lead to a super awareness, which leads to growth, which is satisfying.

What do you think? Is this idealism and romanticism? Is it customer motivation and selfmotivation? Is it the attaching of higher value to your life's work? Does it make good business sense? I believe it is all of these things. I know I have only scratched the surface of a very broad topic in these few paragraphs. Write to me with some of your thoughts and comments and "in-home" stories so that I might be able to expand on this in the future. Values are one of the "keys" to me.

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## **Industry News**

Dampp-Chaser Sold

Allen M. Foote, founder, president and principal owner of Dampp-Chaser Electronics, announced Sept. 16 that he had sold the company to Robert W. Mair and Stephen R. Smith, both of Asheville, NC.

"I will continue to serve the company as a consultant, working primarily on product improvement, design of items now in the line and design of new products for the company," Foote said. He will also continue to supply technical assistance to piano technicians on the installation of piano life saver systems. Foote has been named chairman of the board of directors, emeritus, of the new corporation formed to operate the company, which manufactures Dampp-Chaser dehumidifiers, humidistats and life-saving humidity stabilizing systems for pianos and other related products designed to reduce problems caused by humidity in household closets, office equipment and in many other confined areas.

Steve Smith is president of the new Dampp-Chaser Electronics Corp. and will work primarily in sales and marketing. Bob Mair as executive vice president supervises manufacturing and financial operations of the company. Smith and Mair said they plan no changes at this time in the product line, pricing, distribution or the five-year guarantee of Dampp-Chasers. Piano technicians and dealers will continue to receive the major emphasis in the distribution of all piano-related products. A strong effort will be made to increase distribution of the Dampp-Chaser home closet models.

"Allen Foote has built a fine company and excellent product of proven merit in virtually every application where used. Allen is virtually an institution in the piano industry. We plan to build on Allen's strong base, and to maintain Dampp-Chaser's fine reputation for top-quality products and the best customer service," Smith said

#### Sohmer & Co. Brings Knabe Pianos Back

The board of directors of Sohmer & Co. recently voted to reintroduce the Knabe piano line, which went out of business in May 1985 with the former Aeolian American Corp. In making the announcement, Sohmer President David R. Campbell said, "We are bringing the original, traditional Knabe pianos back into the marketplace — the Knabe pianos that were made in the former Aeolian Rochester plant. We purchased all the Knabe goods in process, the tooling, patterns, and scale designs to implement this eventual decision."

Sohmer's decision to reintroduce Knabe pianos is based on the strong growth of the high-quality performance piano market, added Campbell. "The Knabe piano has a distinctive sound, traditional American styling and a proud American history dating back to 1837. It's perfectly positioned to meet this expanding market segment."

Knabe grand and vertical pianos are now in production and are available to selected former Knabe dealers. Sohmer & Co. also markets the Sohmer and Mason & Hamlin piano lines.

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# The Dumb Sales Claim Contest, Grand Rebuilding, 1911 Piano Values, Re-using Damper Felts and Reader Comments

Jack Krefting Technical Editor

urle Buchanan sends along the following "Cryptoquote" taken from the Orange County Register: XP'U C EXPM PZ UQZZP PQJ EXCFXUP OQJF PQJ EXCFZ XU ZNP ZL PNFJ. — BJFJ KZPM

For those wishing to solve the riddle, we'll tell you that X is really I and E should be changed to P. The answer will be found at the end of the Forum.

#### **Dumb Sales Claim Contest**

This month's entrant is Charles Phillips of Shelbyville, Tennessee, who has heard a few interesting claims made on the sales floor. One claim was that the hammers of a certain brand were impervious to moisture because, when dipped in a glass of water with a similar hammer of another brand, the one separated and the other didn't. Charles notes that an even sillier claim because it came from a technician - was that the dye in the underfelt is to add weight, because that is cheaper than using the correct weight of felt!

#### Re-Using Damper Felt

that has just had a new set of damper felt installed by another technician. The felt looks perfect. Would there be anything wrong with simply re-installing the dampers after restringing or, for that matter, restringing without removing the dampers?"

This is always chancy, especially if the quality of the other technician's work is unknown. Our advice would be to either insist on replacing the felt or to get authorization to do so if the apparently perfect felt proves otherwise after the restringing. Sometimes the felt will have been altered in some way to make it work better, which may prevent it from damping properly when the piano is restrung.

Restringing under existing dampers can work provided the plate is not moved in any direction, but not always. There is also the matter of the guide rail bushings, which cannot be changed if the dampers are not removed and reinstalled. If the previous technician did not rebush and such work is needed, the dampers will have to come out anyway.

If the plate is removed for any reason, it will be all but mandatory that the dampers be removed also, and then it will be easier to judge their condition. Ultimately, however, what really matters is how well they work when the job is done. Any damping deficiencies that exist prior to restringing are likely to worsen rather than improve, especially in the bass.

#### 1911 Piano Values

Ted Wadl of Cincinnati has loaned the Forum a fascinating little book called "Piano Quality" by William Geppert, the third edition of which was published in New York in 1911. Here is an excerpt:

There is another puzzling condition as regards the purchase of a player piano, and that is where

there is a good upright piano of a reliable make to be taken in exchange. The seeker for a player piano may have an upright piano that may be but two, three or four years old. That piano may have cost \$350, \$400, or even \$500. It is expected that the dealer or manufacturer will allow a good price for that second-hand upright, and when the dealer makes an offer there is generally consternation and the dealer is told he is not allowing enough for the second-hand upright.

The same difficulty is presented to the dealer in this endeavor to "trade in" the old upright as was formerly presented when the upright piano took the place of the square. It was a difficult matter for the dealer to act fair and square with himself in his endeavor to make the traded-in square piano a profitable thing. Often the dealer would allow too much for the square and then find it difficult to sell it at anything like the price he had allowed for it.

This same difficulty now presents itself in this exchanging of the upright piano for the player piano. The customer must always remember that the player piano is taking the place of the upright, very much as did the upright that of the square, and there is not that opportunity for disposing of them as presented before the advent of the player piano. The dealer must necessarily protect his own interests, for he not only takes a chance on getting his price for the secondhand upright, but the large number of player pianos being sold is creating a glut in the market for secondhand uprights, and there is great difficulty in disposing of them.

#### **Reader Comments**

Sally Jameson suggests the following procedure when asked by a manufacturer or dealer to inspect a piano, recognizing the difference between such a visit and one requested by the customer:

When called by a manufacturer or dealer to service an instrument there are several points to remember.

l. Refrain from commenting on the basic quality of the instrument. When a customer buys a \$1,400 new piano, obviously he is not going to get a premiere instrument. It's pointless to create friction between

#### **Grand Rebuilding**

## **Overhead**

This is the most difficult cost to record and is doubtless a major reason so many rebuilders are so busy but don't make any real money. It's easy to forget about a lost or broken tool that had to be replaced, or the tire replacement on the car, or an insurance premium, or even something so small as the replacement of light bulbs in the shop.

In the overhead category are things like shop utilities, tool maintenance, car and truck expenses — including depreciation, insurance, taxes, maintenance, license fees and fuel costs — and anything else that is a cost of doing business that isn't strictly labor or material. If you are sued and have to defend yourself in court, or if you have to take someone else to court in connection with your business, that expense is part of your overhead and must be divided by the number of jobs completed during that year to see what your legal costs average per job.

In fact, some accountanttypes have it figured down to the point of knowing in advance just how much overhead to expect to pay for each piano, and therefore have a guide to setting prices. This amount varies with the individual to a great extent because costs vary so widely. Shop rent is one of the biggest variables, costing anywhere from 10 cents to two dollars per square foot per month.

Since it is so difficult to keep track of overhead, we recommend that a business checking account be kept and that all business expenses be paid from that account. Then, provided no personal expenses are paid directly from that account, the checks can be separated into labor, material and overhead. You might be surprised at how much overhead is present when all the little expenses are added to the big ones; if these aren't taken into account, they will eat up all the profit you thought you made on that last big job.

the dealer and the customer by telling the customer that his piano is inferior to a fine piano. The customer got what he paid for and is probably aware that it was the lowest-priced piano available, so a good answer to the inevitable "how good is my piano" question is that it is a nice spinet, or a very good value, or that its casework harmonizes nicely with the decor of the home, which is probably the main reason for its selection anyway.

2. Confine your attention to the specific complaint, and try to categorize problems by need. Any technician can find problems in cheap pianos, and I would certainly report any such to the dealer or manufacturer. But try to refrain from needlessly alarming the customer because the regulation isn't perfect or the coils need lifting on a cheap spinet. After all, some of these

pianos have no casters, or no bridle straps, or actions that really cannot be regulated at all. Keep criticism to yourself unless you are positive that a problem is serious — ribs coming off, cracked plate, etc. — and report additional problems to the dealer.

3. Once a good rapport is established with the dealer you may be able to call him, though never from the customer's home, and explain that you found some further warranty work that should be done. Once the dealer is aware that you have a reasonable and objective attitude, he may be more than happy to approve any additional work you may suggest. A lasting relationship with a dealer could develop with mutual trust so that you will have virtually carte blanche to do whatever is required without having to have approval for every turn of a screwdriver.

November 1986 Piano Technicians Journal/11

Don't blame the dealer for cheap piano problems. He is the middleman. This is the only thing he can sell. No dealer can make a living selling only \$30,000.00 pianos. The maker is responsible for manufacturing problems, but the majority of dealers can be staring at the worst possible piano problems without being aware of them. Many dealers don't have their stock tuned often.



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It's not a priority. Piano sales in recent years have been so poor that the maintenance of floor stock has slipped down the list of "do's" to just below having the restrooms wallpapered. Try to be a little patient with the dealer/manufacturer who is selling what we service.

> — Sally Jameson, RTT Cincinnati Chapter

#### In Conclusion

The answer to our "cryptoquote"

"It's a pity to shoot the pianist when the piano is out of tune."— Rene Coty.

Please send all tech material for publication to me:

> **Jack Krefting** PO Box 16066 **Ludlow, KY 41016**

#### It's The Little Things That Count!

## **Loose Hammer Heads**

**Gerald Foye** San Diego Chapter

s your head loose? There are probably a lot more loose heads out there than one would care to recognize. I suppose I should clarify that the loose heads are hammer heads!

I don't know if I am just the lucky one or whether I spend more time looking for problems; but, it is amazing how many pianos I find with one or more loose hammer heads. This applies to old and new instruments. It appears this fault is often overlooked since most of these pianos have been serviced by other technicians. Many times it is obvious the head has been loose since the day the piano was made. On old pianos time and climatic conditions have likely created the

As I tune I chalk-mark problems including odd sounds no matter how subtle. After completion of tuning I see what can be done about the marked problems. Describing sounds on paper isn't easy but the clue to a loose hammer head is a woody or knocking sound, clicking and lifeless tone with rapid decay. It may be very outstanding or very subtle.

One way to isolate the problem is to exchange the suspect with a proper sounding neighbor. No difference would indicate the sound is not connected to the hammer or butt assembly.

To test, I grasp the shank firmly with my left hand with my finger resting against the glue joint. Rocking the hammer head fore and aft might tell me visually if it is loose or I may often feel it with the finger that is touching the glue joint. This is a good test but not foolproof. If the shank-to-bore is very tight to begin with, the head may still appear to be tight. Sometimes, the only thing holding the head is not the glue joint but the glue collar and that isn't adequate.

If the head doesn't look or feel loose, yet there remains some suspicion, then use a head removal tool. Often just a slight pressure will slide it right off. Or, a small bit of resistance followed by a light snap will indicate only the collar was holding.

Before regluing, a tight bore should be opened slightly with a reamer. Be sure the shank is clean. On a vertical, to reglue a head while action is in the piano, I place the head on backwards briefly, then slip it off and reinstall properly. This distributes the glue. Where possible it is best to rotate the head.

Even though the glue is still wet, you should notice an immediate improvement in tone. Follow with a light reshaping (a voicing procedure) and you have restored the tone. ■

# S O U N D BACKGROUND

# The Friederici Family; The First Upright Pianos

Jack Greenfield Chicago Chapter

The Origination of Upright And Square Pianos

After Gottfried Silbermann's initiative in the early 1730s in building the first German pianos, he was soon followed by other German instrument makers. They did not copy Silbermann's grand pianos with Cristofori actions but introduced new forms — with new types of actions. The earliest of these instruments with dated origin confirmed are a 1742 square by Johann Socher, an obscure Bavarian builder, and a 1745 upright by Christian Ernst Friederici, a leading instrument maker of Saxony trained by Silbermann. It is likely that square pianos were introduced earlier, but none previous have survived. Uprights had been made before in Italy in 1739 or earlier by Don Domenico, a builder influenced by Cristofori.

Work of the Friederici Family

Christian Ernst was the first member of the Friederici family to become an instrument maker. Before his birth, his parents had moved to Merrane in western Saxony from the South Tyrol region of Austria. "Friederici" was the Italianized form of the German family name which had been "Friederichs" originally. Friederici prepared for a career in instrument making by studying with Gottfried Silbermann in Freiburg, about twenty-five miles from Merrane. In 1737, Friederici moved to Gera, another

nearby town where he started his own shop. He was joined by his brother, Christian Gottfried, younger by five years, who entered into the business in 1744.

Friederici's business was well established, and he moved up into the place held by Gottfried Silbermann as Saxony's leading instrument maker after Silbermann died in 1753. Silbermann's nephew, Johann Daniel, who took over the Freiburg shop, was unable to maintain the leadership Gottfried's business had had or match the prominence which the nephews in Strasbourg, Johann Andreas and Johann Heinrich, achieved in

Bach . . . wrote that he preferred the two Friederici clavichords he owned to those made by other contemporary builders. Bach was also very fond of a Gottfried Silbermann clavichord . . .

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France. Although many others left Saxony during the Seven Years War, 1756-63, the Friedericis managed to endure the conflict and then continue on as leaders in instrument making.

Among the famous owners of Friederici instruments were C.P.E. Bach and Mozart. C.P.E. Bach, in a 1773 letter to Forkel, wrote that he preferred the two Friederici clavichords he owned to those made by other contemporary builders. Bach was also very fond of a Gottfried Silbermann clavichord he had used for over fifty years. Another famous person, Goethe, in one of his books mentions that his parents owned a harpsichord by "Friederici in Gera whose instruments are famous far and wide."

Friederici died at Gera in 1780. Since he had no children and his brother Christian Gottfried Friederici had died in 1777, the Friederici business was taken over by his nephew Christian Gottlob Friederici (1750-1808). Christian Gottlob's son Christian Ernst Wilhelm (1782-1872) and grandson Ernst Ludwig (1806-1883) continued the Friederici shop in Gera for two more generations. As the interest in harpsichords faded, the Friedericis shifted to supply the growing demand for pianos. The Friederici business ended at the death of Ernst Ludwig in 1883.

#### Instruments

A historical-biographical dictionary of men in the music industry published in 1790-1792

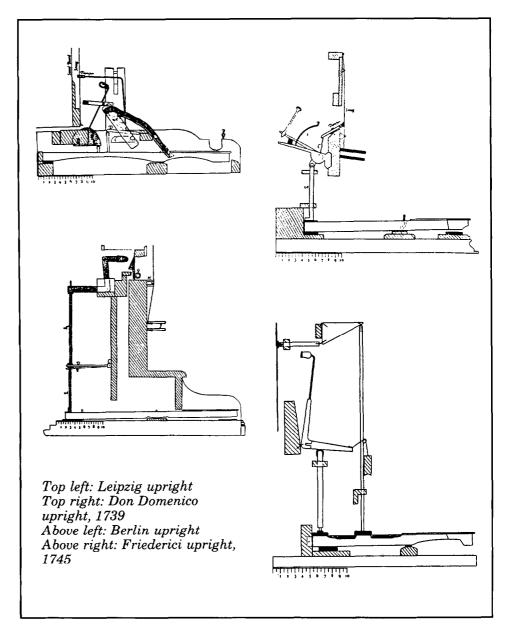
(Historisch- biographisches Lexicon der Tonkunstler, by Ernst Ludwig Gerber) states that Friederici built 50 organs and many square pianos, "famed and scattered over half the world." Of all these square pianos, there is only one surviving instrument that may have been made by Friederici. Boalch in Makers of the Harpsichord comments on this instrument now owned by a collector in the United States.

The instrument is shown in Historical Pianos by Michel (page 124, 1970 edition) with the caption "Frederica Square Piano, Gera, Germany about 1773; bichord Clavichord." It was built originally as a square piano. Some time afterward, the piano action was taken out, replaced with a harpsichord action, and the instrument was sold as a Friederici spinet. The alteration turned out to be unsatisfactory, and in a second change the present clavichord action replaced the harpsichord action. All of these changes were made before the instrument was sent to the United States.

Friederici is best known for his upright pianos which he called "Pyramidenflugel," (pyramid grand pianos) because of their shape. There are three still in existence, two dated 1745, believed by some historians the first in Germany, and one dated 1750. Also surviving is a four and one-half octave clavichord that may have been owned by Mozart and later by Liszt. Surviving instruments also of historic interest built by Friederici's nephew, Christian Gottlob Friederici, include a square piano dated 1804, a grand piano-pipe organ combination built about the same time and two clavichords built one or more decades earlier. Christian Gottlob's clavichords were considered equal in quality to those of his uncle.

Surviving Early Upright Pianos

Judging from their extreme scarcity today, very few Pyramidenflugel or Pyramidenklavier, another name for such upright pianos, were built before the end of the 18th century. Besides the 1745 Friederici pianos in the Brussels Conservatoire and Goethehaus Frankfurt collections and the 1750 Friederici piano in the Neupert Nuremberg collection, others are



two German upright pianos of unkown origin described in Harding's The Piano-Forte. One of these, observed in the Heyer collection, Leipzig, has an indistinct date on the topmost key, F6, which can be interpreted as either 1735, 1765, or 1785. The other piano, an undated. unsigned instrument in a Berlin museum is believed to have been built by Friederici. Italian collections contain two Italian-built upright pianos that may have been made before Friederici's. One is a piano by Don Domenico, dated 1739, in a museum in Florence. A similar unsigned, undated instrument, possibly by the same builder, is in a collection in Milan.

# Design Details of the Early Upright Pianos

The early upright pianos first

built in the middle of the 18th century were derived from the vertical harpsichord, known as the clavicytherium. The modified harpsichord action with wire springs and weighted keys in these instruments made them harder to play than horizontal harpsichords. The upright piano appeared a more desirable alternative for those who wanted vertical instruments because they took up less floor space. However, the eight- to tenfoot height of the vertical instruments prevented their use in rooms with lower ceilings.

The outline of the case of the clavicytherium was that of the harpsichord turned upright, a straight side on the left, a rounded tail at the top and a curved side following the pattern of the string

ends on the right. The early upright piano in the Heyer collection, Leipzig, has the typical clavicytherium shape. Friederici originated the design of the symmetrical narrow truncated pyramidal shaped case of his pianos. The unsigned, undated, early upright piano in Berlin has a similar shape. The strings in the Leipzig piano are straight strung vertically. In Friederici's pianos the strings are inclined diagonally to the right, running from the hitch pin on a block along the right side to the tuning pins just above the keyboard. The strings in the Berlin piano are in an usual arrangement probably never used in any other piano. They are strung vertically but are placed symmetrically according to height with the longest strings in the middle tapering down to the smallest on the side like an arrangement of organ pipes. This makes it necessary to use an intricate system of wood and iron stickers, tracker rods and levers to link the keys to the hammers.

It is believed Friederici designed his piano actions as simplified modifications of the Cristofori actions he became familiar with while studying with Silbermann. Don Domenico derived his piano action from what he learned from Cristofori or other piano builders associated with him in Florence.

In Friederici's 1745 action shown in Harding's *The Piano- Forte*, the back end of the key supports a tall jack or sticker. The sticker raises a

horizontal lever permanently attached to the hammer butt forming a large L-shaped wooden piece. The hammer assembly pivots from an attachment at the bottom left corner of the L- piece to the hammer rail. The drawing does not show the escapement mechanism. Friederici's 1750 action is shown in Walter Pfeiffer's The Piano Hammer. In this action the hammer assembly with a semi-circular butt is raised by a perpendicular fixed jack attached on the back end of the key. After the key is raised a given distance, let-off occurs when the top of the jack slips into a notch in the semi-circular butt. Both Friederici action diagrams include damper systems actuated by the keys through arrangements of stickers and levers.

The key and tall sticker acting directly on the hammer butt of Don Domenico's piano action shown by Harding and Pfeiffer have a resemblance to the same parts in Friederici's 1745 action. However, the top of the Don Domenico jack is permanently linked by pinning to the projecting base at the hammer butt. Also attached to the base of the hammer butt is a cord that pulls a damper lever with a padded end away from the string. There is no let-off mechanism, the player must halt key movement in time to avoid blocking the string.

The hammer assembly of the Leipzig upright piano action shown by Harding includes a large semicircular hammer butt which is lifted by a short, fixed jack attached on the back end of the key. A second jack on the key raises the damper lever. There is no escapement system evident. In Harding's drawing of the upright piano in Berlin, the hammers are suspended by strips of parchment glued to a hammer rail behind the bottom edge of the sound board. The hammers are driven toward the strings by S-shaped jacks moved by the system of stickers, trackers and levers previously mentioned. No dampers or escapement are provided.

Most of the hammer heads are rounded pieces of wood with leather pads on the front end, but one piano has parchment roll/leather pads as used in Cristofori's 1726 piano. Following are hammer details:

Freiderici pianos: short sections of wooden rod covered with leather pads on striking surface; hammer shanks are stiff heavy wire.

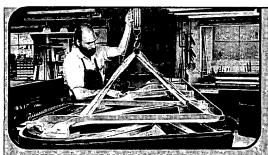
Domenico piano: round long thin wooden rods flaring out to padded striking surface.

Piano at Leipzig: small rounded soft leather covered wooden heads with a small block of lead placed behind to give more impetus to the hammer blow and aid return of the hammer; hammer head mounted on stiff wire shank.

Piano at Berlin: small cylinders consisting of rolls of parchment — original leather pads on striking surfaces missing; hammer heads mounted on specially shaped wood pieces for engagement by S-shaped jacks.

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These actions operate on several principles of the Cristofori action—the hammer is pivoted or hinged by leather or parchment to a hammer rail, and motion is transmitted to the hammer by a fixed piece or jack attached to the key. Friederici's 1745 action and the Leipzig

piano's action are downstriking types as in the modern vertical piano, but his 1750 action and the others are upstriking types. The actions were simplified by elimination of intermediate levers and backchecks. Some also do not provide any escapement. The results of

these omissions are inferior actions. As the square piano was proving to be much more successful during the period in which these pianos were built, interest in the upright waned, and nothing was done to improve it until the final years of the 18th century.





#### 1987 CALIFORNIA STATE CONFERNCE

The Golden Gate Chapter and Auxiliary invite you to the 20th Annual California State Conference on February 13-16, 1987 at the Sheraton Palace Hotel in San Francisco, followed by a tax deductible tour (with technical classes) to Hawaii. All members of the Western Region will soon receive promotional materials and registration forms. Others may obtain them from Sid Stone, 16875 E. 14th Street, San Leandro, CA 94578. Conference registration and hotel rooms will be the lowest possible. The Hawaii trip will be priced comparable to the Hawaii trip following the PTG Convention in 1981.

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#### THE MUSICIAN'S

# TUNER

# Inharmonicity: Best Resolved Aurally Or Electronically?

Tom Lowell Rogue Valley, OR, Chapter

ention the topics inharmonicity and/or stretch to a group of piano tuners and you're apt to hear a wide variety of opinions as to what these words mean, and how they affect piano tuning. This confusion stems from tuners (both aural and electronic) improperly using electronic tuning aids and/or misinterpreting their data.

Consider the following questions, which will be answered in this article:

- 1. Which has more natural stretch, a perfect 6:3 octave in a spinet, or a perfect 6:3 octave in a concert grand?
- 2. Do fine aural tuners stretch the treble and bass areas in spinets more than in concert grands?
- 3. Why do large grand pianos allow tuners to artificially stretch octaves and double octaves in the bass and treble areas to their advantage?

Before answering these questions, I will define a few terms relating to octaves which I hope will be adopted by others in future discussions on this subject, and then explain how and why the original confusion about inharmonicity and stretch came into being.

**Natural stretch** — the phenomenon owing to the inharmonicity of piano wire where, in an octave for example, a set of par-

tials are at the exact same frequency (piano tuners hear this as beatless), and yet the fundamentals do not have the theoretical relationship where the higher note is an exact doubling of the frequency of the lower note; i.e., the fundamental of the higher note will need to be slightly higher than an exact doubling of the frequency of the lower note. (See Reblitz' *Piano Servicing*, *Tuning*, and *Rebuilding*, page 53.)

Artificial stretch — the phenomenon where piano tuners per-

...why is it the current, mistaken, notion among most piano tuners, that spinets are more stretched than grands? The origin of the misconception can be traced back to the original use of electronic tuning aids, and is unfortunately still with us today.

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ceive the need, in an octave for example, to cause a beat on the wide side of a set of coincident partials, i.e.: octaves in the midtreble area must be artificially stretched in order to achieve naturally stretched double octaves. (See Rick Baldassin's article "On Pitch," on page 31 of the February 1984 Journal.)

Natural compression — The phenomenon where a set of coincident partials are at the exact same frequency (beatless) and yet the fundamental frequency of the upper note is narrow of an exact doubling of the frequency of the lower note.

Artificial compression — The phenomenon where piano tuners perceive the need, in an octave for example, to cause a beat on the narrow side of a set of coincident partials. Artificial compression is more obvious in double and triple octaves, and is necessary to compensate for the effects of inharmonicity.

Now returning to example 1, why is it the current, mistaken, notion among most piano tuners, that spinets are more stretched than grands? The origin of the misconception can be traced back to the original use of electronic tuning aids, and is unfortunately still with us today.

Witness the following quotation: "Many measurements made by means of the Conn Chromatic Stroboscope confirm what had always been supposed: namely that there exists an apparently ineradicable tendency on the part of tuners to stretch the octaves both in the high treble and the low bass." (White, Braid, Piano Tuning and Allied Arts, Boston, MA, Tuners Supply, page 109).

Dr. White, not fully understanding the phenomenon of inharmonicity at this point in his writings (1917), puts the blame for this on our imperfect human ear and tries to explain the situation with the statement, "This paradox is resolved, of course, only when we understand that we are here dealing with the property of the human ear." Continuing the train of thought here when piano tuners initially began using ETAs, they tuned using the technique of matching the fundamental frequency of the note being tuned to the theoretical frequency of the corresponding equal-tempered pitch reference of the ETA. When a piano is tuned in this manner, anyone with a trained musical ear knows this to be incorrect, as it is obvious that the low bass notes are too sharp and the high treble notes too flat.

Upon comprehending this fact, these tuners, rather than admitting that the internal reference of the machine was out of tune with the frequencies emanating from a correctly tuned piano, proclaimed that the piano was "stretched," that is to say out of tune with the machine. In actual fact, when one measures an in-tune piano, it is the machine which needs to be stretched!

I am thus using the term "natural stretch" to describe the condition in a piano where in an octave, for example, the coincident set of partials will be beatless and yet the ETA needs to be "stretched" to accommodate the more than double relationship of the frequencies of the fundamentals.

Now back to our first question: which has more natural stretch, a perfect 6:3 octave in a spinet or a perfect 6:3 octave in a concert grand? Neither! By definition they are both stretched exactly the same. This is because by definition a perfect 6:3 octave is beatless at the coincidence of the sixth and third partials of the octave notes. And it is the presence or

...these tuners, rather than admitting that the internal reference of the machine was out of tune with the frequencies emanating from a correctly tuned piano, proclaimed that the piano was "stretched." that is to say out of tune with the machine. In actual fact, when one measures an in-tune piano, it is the machine which needs to be stretchedl

absence of beats that most correctly determine the "stretch" of an octave — not how it measures electronically in cents deviation. For example: consider our 6:3 octaves in the spinet and the concert grand. If one were to measure

Computer programs and tuning techniques that fail to account for the importance of the musician's sense of relative pitch, and which rely exclusively on the theory that the more the inharmonicity, the flatter the bass needs to be. are in error.

the width of the 6:3 octave in the spinet we would find a wider distance in cents deviation (say four cents) than in the 6:3 octave in the concert grand (say one cent). This might lead an uninformed person to believe that the spinet was therefore "stretched" more than the concert grand, even though both octaves are beatless. To refute this line of reasoning, consider the same situation except now suppose that the spinet 6:3 octave has been slightly narrowed so as to produce a slight beat in other words, a "flat" or narrow octave. But even though it is now a narrow octave, it will still read wider in cents deviation (say two cents, now) than the concert grand 6:3 octave (one cent). To follow the line of reasoning based solely on cents deviation we would now have an octave which is both "flat" (because its beat is on the narrow side) and "stretched" (because its cents deviation is still wider than the concert grand's) at the same time. Confusing to say the least.

It just doesn't make sense to use a terminology that would allow for an octave to be narrow of beatless and stretched at the same time.

On to the second question: do fine aural tuners stretch the treble and bass areas in spinets more than in concert grands? The answer is no! Remember - our definition of stretch refers only to beat rates and not cents deviation. It is true that in order to achieve pure 4:1 double octaves, 4:2 octaves in the treble regions may need to be more artificially stretched in spinets than in grands. Even so, the 4:1 double octaves in both pianos have generally comparable beat rates. However, the bass area is where the answer is most obvious and important. It is common in concert grands to have pure 12:3 double octaves, and pure 12:6 octaves. If the same were done on a spinet, the resulting bass note would be so flat (in cents deviation) as to be offensive to a trained musician's sense of relative pitch!

Computer programs and tuning techniques that fail to account for the importance of the musician's sense of relative pitch, and which rely exclusively on the theory that the more the inharmonicity,

the flatter the bass needs to be, are in error.

At this point, I will note that musicians generally accept notes on the sharp side better than notes on the flat side. This makes the artificial stretching of double and triple octaves in the treble areas of spinets more acceptable than in their bass. Even naturally stretched 8:2 double octaves in the bass areas of spinets produce notes too flat (in cents deviation) to be acceptable to trained musicians' ears.

This brings us to our third and final question: Why do large grand pianos allow tuners to artificially stretch octaves and double octaves in the bass and treble areas to their advantage? To answer this question, let's go back to the concept of the importance of relative pitch. As there is relatively little inharmonicity in large grand pianos, we can artificially stretch all their octaves and double octaves without making notes sound flat (in cents deviation) in the bass or sharp (in cents deviation) in the treble. This also answers the question why grand pianos sound so much better than spinets. It is because in the grands, tuners can achieve almost beatless single, double and triple octaves, while not exceeding the limits of relative pitch. While in the spinets, tuners can have one - beatless octaves — or the other — good relative pitch — but both are impossible at the same time. Thus in large grands, tuners can

artificially stretch octaves and double octaves to their advantage so as to achieve triple octaves which are both nearly beatless and musically acceptable.

In the next segment of this series, "The Musician's Tuner," we will examine why smaller pianos such as spinets are more properly tuned with *slower* thirds in the temperament area and continuing down towards the bass than in large grand pianos with less harmonicity. I will also discuss why the bass is artificially compressed and not stretched in properly tuned spinets and smaller pianos.

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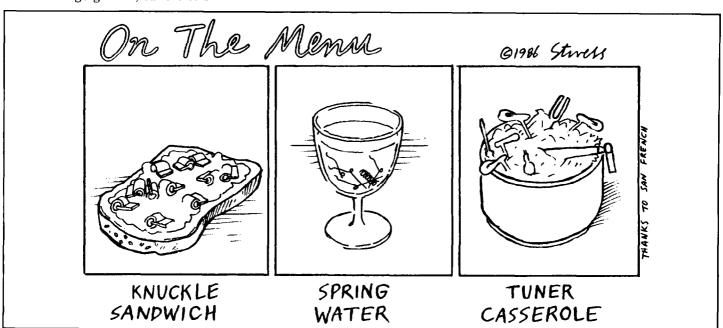
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# LARGE

# An Immigrant Story

Charles P. Huether New Jersey Chapter

his past July 4th weekend was crowded with activity far beyond the usual, especially in my part of the country (metropolitan New York). The streets of New York were crowded and busy for four days celebrating the rededication of the Statue of Liberty. It was broadcast on national television so that everyone all over the country and especially those who had participated in donating funds for the restoration could participate.

Watching this celebration brought to mind some material I had come across through the years about an ocean crossing from Europe in search of the promises and opportunities of America.

A search of the files located a rough outline of some autobiographical notes of Alfred Dolge, genius and guiding spirit in the development of the American piano industry in the latter half of the 19th century. His account of the trip across the ocean is interesting. It is an experience which I am sure was repeated over and over again, but which was hardly mentioned in the immigration accounts I heard and read during the celebration. I

think you will find it interesting.
We pick up his narrative:
"The Austria-Prussian War
having just broken out and busi-

ness paralyzed all over Europe, I

Not only that our rations were scant but the quality of the provisions were of such a kind that most of the time it was impossible to eat the stuff and as a result more than half of the passengers died during the voyage. We left Hamburg with 336 passengers on board and arrived in New York numbering only 132.

concluded to go to America, to which plan, however, my father as well as my mother were opposed and would, therefore, not aid me. However, having no means of any kind, I had to borrow the necessary money and pay my passage to America from kindly disposed relatives and friends in which I succeeded, so that I left Hamburg on the sailing vessel "Victoria" on July 6, 1866, as a steerage passenger. (Dolge was 18 years old).

"Although in exchange for our money, passengers received a printed contract from the ship owners or their agents setting forth rights of a passenger on board a ship and all food as well as rations to which we were entitled, the treatment which we received just as soon as we got into the open sea beggars description.

"Not only that our rations were scant but the quality of the provisions were of such a kind that most of the time it was impossible to eat the stuff and as a result more than half of the passengers died during the voyage. We left Hamburg with 336 passengers on board and arrived in New York

numbering only 132.

20/November 1986 Piano Technicians Journal

"When the ship colic broke out and the people were dying off every day, one of the victims was a father of a family of eight children, the smallest being a baby of only about six months. The mother could not take any of the food offered to us and was actually starving. I had observed the Captain's larder and found a way to get of the same some good biscuits and other things of which I took whenever I could for the mother of these eight children, at the same time I went to the Captain with my contract in hand demanding such food as we had bargained for and openly threatening him with exposure if he did not comply with my request.

"His reply was that if I did not keep still he would put me in irons. Soon after, some miserable whelp reported to the Captain of my stealing biscuits for the woman and I was locked up for a few days. During that time I wrote out a clear statement of our mistreatment addressed to the German Consul in New York and as soon as I was freed, I read the document to a number of passengers and although we were in the midst of the greatest misery imaginable, every one of us halfstarved to death, seeing daily 10 or 12 bodies of our fellow passengers thrown over as food for the sharks, who followed our ship in

large numbers, I could not get one signature from any of the passengers. That was my first lesson in how cowardly human beings are. Every one of the passengers whom I approached said he would sign the paper after we would leave the ship, fearing that the Captain might punish us as long as we were in his power.

"I got my revenge on the Captain, who was a contemptible, vulgar brute. Whenever there was a pleasant day, he would make one of the sailors play dance music on an accordion and he would dance on the quarter deck with a girl who roomed with him. The passengers, of course were always spectators and consequently the rear part of the ship was deserted. On the deck of the stern of the ship the Captain kept about 100 live chickens, as well as the eggs. On one of those dancing days, I loosened all the slats of the chicken coop and as a result all the chickens went overboard so that Mr. Captain had no more chickens or eggs for the rest of the voyage than did the passengers. He never found out who played him the trick but I am sure that his suspicion was only

"When we were nearing Staten Island (New York Harbor) 63 days after leaving Hamburg, the Captain had three hogs killed, which had been fattened duringing the voyage and for the first time the passengers received eatable meat and peas. The sight of land and this lucullian feast made the passengers forget all of the sad experiences of the trip and when I approached them again for the signature of my complaint to the German Consul, everybody but three refused by saying: 'It is all over now and what's the use.'

"Perhaps the experience which I had on this ocean voyage and the opportunity which I had of studying people of all classes and standards has helped me very much in later life to look upon everything with a philosophical eye. Surely, many of my sentimental and idealistic dreams received severe shocks at that early date.

"I arrived at Castle Garden, NY, (the immigrant reception station before Ellis Island) with just about 25 cents in my pocket because what spare money I had when leaving Hamburg I was compelled to give to the cook of the ship in order to get once in awhile something to eat and how that good man understood grafting! You can imagine when I say that I paid, more than once, one dollar for a potato besides being compelled to help that good man in washing dishes, etc. Most of my clothing had gone overboard because whenever a passenger died, whatever had been near him in his bunk had to go overboard. I had the misfortune of seeing four men die who had slept in the same bunk with me. I spent the first night sleeping on the wooden benches of old Castle Garden making a very unpleasant night of it because of the intimate acquaintance with the thousands of rats which had their circus every night in the old building. My 25 cents was soon spent for milk and bread and I started to find a place in the city with just

Thus begins the story of Alfred Dolge in America. He did succeed, helping create the modern piano with his advanced designs for making felt and hammers, becoming the largest and most influential manufacturer of piano parts and a key person in the industry. But that is another story.

five cents in my pocket."

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# ECONOMIC AFFAIRS

# Using The Consumer Price Index And The Employment Cost Index

Carl D. Root, RTT Washington, D.C. Chapter

he purpose of this article is to show how the U.S. Government's Consumer Price Index and the Employment Cost Index can be used by the professional piano tuner/technician. The Sherman Act prohibits any activity which can be construed as a call to group action so the information on prices here is intended solely for individuals and not for group discussion. This topic is appropriate for the Journal because education — technical, business and economic — is the proper function of the Piano Technicians Guild.

There are several variables that are likely to influence your service fees. Your competitors' fees are only a small part of the data you should assemble to make an informed decision. Besides, to base your rates on your competitors' assumes that you have the same goals, skills, experience, clientele and business acumen. My association with professional tuner-technicians both locally and nationally convinces me that we have each carved out a unique niche in the piano industry and the wide range of prices being charged for apparently similar services is perhaps as it should be. Your data should include local service fees charged by a number of other home service professionals such as a plumber, locksmith, appliance repairman, chimneysweep, carpet cleaner, and electrician. What is their hourly rate in the field (the same study could be done for shopwork)? How long does the service take? What is the

4 4

Consider the standard of living that you feel appropriate for you and your family . . . Whatever these standards may be, we need to devise a way to maintain that standard consistently throughout our working lives.

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necessary training and skill required to perform the service competently? What is the necessary investment in equipment? How do these variables compare to the services you perform?

Consider the standard of living that you feel appropriate for you and your family. If you have entered the profession because you have a special fondness for this type of work, you might be willing to accept a lower standard of living. Likewise, if you feel the demand for your services is less than the supply. Whatever these standards may be, we need to devise a way to maintain that standard consistently throughout our working lives. Fortunately, we can turn to the Bureau of Labor Statistics which provides detailed information that reflects the cost of living changes and the purchasing power of our income. A variety of reports are available from the Government Printing Office, Washington, D.C. 20402, including: CPI Detailed Report, Relative Importance of the Components in the CPIs, The CPI: Concepts and Content Over the Years, National Survey of Professional. Administrative, Technical and

Clerical Pay. To obtain a summary of current CPI statistics, call: (202) 523-1239 for a 24-hour recorded message.

The CPI is a measure of the average change in prices in a fixed market basket of goods and services. There are two commonly published CPIs: first, the CPI-W, which covers urban wage earners and clerical workers and includes roughly half the population, and second, the CPI-U, which includes 80 percent of the total institutional civilian population and includes also professional, managerial, non-technical workers, the self-employed, short-term workers, the unemployed, retirees and others not in the work force. The CPI is based on prices of food, clothing, transportation fares, charges for doctors' and dentists' services and other services that people buy for day-to-day living. These prices are collected in 85 urban areas across the country and combined to form a U.S. city average. Although the CPI has been in use for at least 70 years, the price changes are measured from a designated base year, 1967. The base number for that year is 100. For example, if the CPI is listed at 327.9 for June, 1986, then the market basket of goods which cost \$10.00 in 1967 would now sell for \$32.79. The CPI can be used to compare prices between any two periods as shown in the following example:

> 233.2 (CPI Jan. 1980) 327.9 (CPI June, 1986)

\$420.00 (price, Jan., 1980 X (price, June, 1986)

or  $X = \frac{327.9 \times \$420.00}{233.2} = \$590$ 

This discussion might end here except that your income, and the income of your clientele, does not necessarily correct itself automatically to provide constant purchasing power as prices fluctuate.

There is, however, a strong correlation between price increases and wage increases, especially considering that the most widespread

... your income, and the income of your clientele, does not necessarily correct itself automatically to provide constant purchasing power as prices fluctuate.

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use of the CPI is in wage adjustments and collective bargaining negotiations. Since 1975, the Bureau of Labor Statistics has kept data to determine the changes in purchasing power of wages and prices. The Employment Cost Index, or ECI, showed a small but steady decline in the late 70s while the early 80s actually revealed an increase in purchasing power. The fact that the rate of wage increase has been declining recently has been more than offset by an even greater decline in the increase of prices. Using 1977 as a base year, the ECI in constant dollars dropped to 92 in 1980, rose to 94 in 1984, and had recovered to 97.2 as of June 1986. In other words, if your income has risen less than 97 percent of the increase in the CPI over the last 10 years, then your standard of living has decreased more than that of the average wage earner.

The average CPI increase during each of the last 15 years has been close to seven percent per year. The best of times were 1971, 1972, 1982, 1983, 1984 and 1985 when the CPI increase was less than four percent in each of those years. The worst of times were 1974, 1979 and 1980 when the annual CPI increases were well above 12 percent each year. ■

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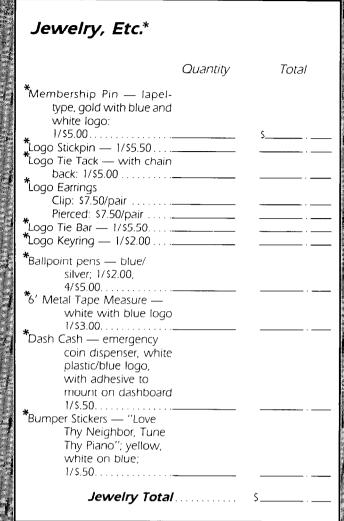
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## Associate With The Guild!

#### Ronald L. Berry Vice President

We associate with many things in our lives: our friends, our neighbors, our church, our neighborhood association, and the National Geographic Society. Why not associate with the Piano Technicians Guild? The recent restructure of membership categories has made it easier than ever to become a member. Associate membership requires no testing, so applications can be processed more quickly. Those who are qualfied will be upgraded to RTT after passing the exams. When you associate with PTG you are becoming part of a network of technicians throughout the world and are able to draw on the collective expertise of all these people. The more you participate in your membership, the more you will get out of it. There are chapter meetings, conventions and seminars which provide a wealth of technical knowledge. This is over and above the technical information in the Journal.

Because the Guild is a volunteer organization, most seminars have a registration fee of less than \$100. I get information for weekend seminars on business or income tax preparation and they usually run \$300-\$400. Elsewhere in this *Journal* you will find a list of coming events which will show you that these seminars are available all over North America throughout the year. All these regional seminars culminate in the annual convention with its Institute which takes place this year July 20-24 in Toronto, Ontario.

So associate yourself with PTG as a member. Be active in chapter activities and take advantage of the many educational opportunities that are offered. You will be a winner in the end as you see your technical abilities improve and your income increase.

## Membership Report — August And September 1986

#### **New Members**

#### ■ REGION 1

S.C. Pennsylvania — 170 Bair, Kenneth E. II RD 1, Box 405 Landisburg, PA 17040 (Associate)

Reading-Lancaster, PA — 195
Donley, Bryan R.
329 West Main Ave.
Myerstown, PA 17067
(Associate)

#### REGION 3

San Antonio, TX — 782 Walters, Byron R. 12415 McDermots Farm San Antonio, TX 78233 (Associate)

#### REGION 5

Edmonton, AB — 002 Cheung, Louis 477 Lee Ridge Road Edmonton, AB J6K 0N9 CANADA (Associate)

#### REGION 6

Montana — 594
Ferraro, Tino
946 Downsview Place
Kimberly, BC J1A 3C2
CANADA
(Associate)

Utah Valley — 846 Don C. Peterson 11530 No. 6000 West Highland, UT 84003 (Associate)

Phoenix, AZ — 851 Bennet, Richard L. 135 N. Kachina Mesa, AZ 85203 (Associate)

Los Angeles, CA — 901 Masahiro, Matsushita 15813 So. Halldale Ave. Gardena, CA 90247 (Associate)

Nobuaki, Yamamoto 1441 152nd St. Gardena, CA 90247 (Associate)

San Diego, CA — 921 Paulus, Jane E. 295 Chinquapin Ave. Carlsbad, CA 92008 (Registered Technician) Sacramento Valley, CA — 956 Fox, Dale R. 7101 34th St. North Highlands, CA 9566-(Associate)

Wieland, George A. 5254 Glancy Drive Carmichael, CA 95608 (Associate)

Portland, OR — 971 Olson, Marilyn K. 61375 Barger Rd. St. Helens, OR 97051

#### AFFILIATE MEMBERS

Anderson, Jerry V. 6, Rue de Cadix Paris, France, 75015

Harper, Ronald Jack 1 Balmoral Rd. Mortdale Heights Sydney, NSW, 2223 Australia

Harper, Terry 193 North West Arm Road Grays Point, NSW, 2232 Australia

## Calendar Of Coming Events

Date	Event
Nov. 7-9, 1986	North Carolina State Conference Adams Mark Hotel, Charlotte, NC Eugenia Carter; 4317 Commonwealth Ave.; Charlotte, NC 28205; (704) 568-1231
Nov. 8, 1986	Intermountain Seminar Brigham Young University, Provo, Utah Jack Reeves; 486 N. 300 W.; Orem, UT 84057; (801) 225- 1757
Nov. 15, 1986	<b>20th Anniversary Baltimore Chapter Seminar</b> Omni International, Baltimore, MD Christie Cornetta; 10 Drawbridge Ct., Baltimore, MD 21228; (303) 788-3684. David Hughes; 13228 Old Hanover Rd.; Reisterstown, MD 21136; (301) 429-5060.
Jan. 9-10, 1987	<b>Arizona State Seminar</b> Arizona State University, Tempe, AZ Wirt Harvey; 5901 Calle del Norte; Phoenix, AZ 85018; (602) 945-8515
Feb. 13-16, 1987	California State Conference San Francisco Sheraton Palace Sid Stone; 16875 East 14th St.; San Leandro, CA 94578; (415) 481-1903
Mar. 6-8, 1987	<b>1987 South Central Regional Seminar</b> Hilton Inn Northwest, Oklahoma City, OK Keith McGavern; P.O. Box 2547; Shawnee, OK 74802-2547; (405) 275-8600
Mar. 19-20, 1987	1987 Memphis Mid-South Seminar Memphis, TN Ken Tapp; 4131 Old Brownsville Rd.; Memphis, TN 38134 (901) 386-1515.
Mar. 20-22, 1987	<b>1987 Central West Regional Seminar</b> University of Minnesota Paul Olsen; 3501 Adair Ave. N.; Crystal, MN 55422 (612) 533-5253.
April 2-4, 1987	Pacific Northwest Conference Thunderbird Motor Inn, Yakima, WA Kathleen Hodge; 4401 Henning; Yakima, WA 98901; [502] 453-4314
Аргіі 2-5, 1987	1987 Pennsylvania State Conference Scranton, PA Howard A. Yepson; 94 Brook Street; Carbondale, PA 18407; (717) 282-5151
April 24-26, 1987	<b>New England Regional Seminar</b> Merrimack Hilton, Merrimack, NH Douglas Kirkwood; 9 Woodbine Lane; Amherst, NH 03031; (603) 424-7996
* July 20-24, 1987	30th Annual Piano Technicians Guild Convention & Institute Constellation Hotel, Toronto, Ontario, Canada Home Office; 9140 Ward Parkway; Kansas City, MO 64114; (816) 444-3500

## **MOVING?**

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# Auxiliary Exchange

#### President's Message

Writing in the Monterey Bay Chapter Newsletter, **Bob Hoffs**-tetter presented an astute analogy. Returning from Las Vegas he noticed several long freight trains, each with four or five engines required to pull the many freight trains over the mountains. Bob likened this to an organization, pointing out that the officers supply the power, but the members carry the load.

The Auxiliary has a mountain to climb! Since the number of chapters has been steadily diminishing, it is time to take stock and determine where we are going and where we want to go in the future.

Julie Berry has graciously volunteered to moderate an organizational meeting in Toronto. If there ever was a time to make your view known, it is now! We need ideas to present at this meeting.

Some suggest we do away with Members-at-Large. Others have suggested we have only Members-at-Large and eliminate Chapters. Some feel we need to reorganize into districts i.e., northern California, Texas-Oklahoma, Florida, New England, etc.

Should we maintain our cur-

rent structure of delegates or go to a "one person one vote" P.T.G.A. Council? Or, perhaps, do something entirely different from what anyone has yet presented. Maybe your idea will be the one that will carry the day! We have a committee to assemble all ideas, put them in order, and report to the Board; to Julie's organizational meeting, and thus to Council.

The Committee consists of Rebecca Henneberry (Chair) Julie Berry and Marge Evans. Send your ideas to Rebecca and she will send copies to Julie, Marge and me. Chapters are encouraged to discuss this at their meetings and make the results known to this committee.

We cannot climb this mountain overnight, but if we are going to climb it, and we are, then we will have to start now! The P.T.G.A. Board will supply the power — and you members will carry the load, your thoughts and ideas, and together we will reach our destination.

There will not be any "caboose" on this train, since that is someplace for the crew to "goof off" when they are not performing their duties. Your crew will not have time for that. They all care very deeply about the Auxiliary.

Ginger Bryant

#### What's Your Sign?

In most all metropolitan newspapers, space is allocated to the oftenread and generally spoofed columns devoted to horoscopes. Here are listed the names of great personalities of the past and present who were born on a specific date. In addition there are guides, warnings and recommendations to individuals born at other times in the year. Folks seem to know "their sign." Books on horoscopes and charts are big business. How did this come about?

It has been the consensus of scholars that the development of horoscopes and the pseudo-science of astrology evolved from a very general law-of-averages. Of course the purveyors of astrological charts and year-long horoscopes claim that careful consideration is given to the hour an individual is born as well as to the day and month. The position of the various planets is explored. Is the baby to be ruled by Mars? Saturn? Mercury? Is the planet ascending? Or is it in conflict?

We were surprised to learn in high school Latin that Caesar regularly consulted the stars, had his "on staff" oracle for counsel and recommendation. We read with loathing that Hitler, too, relied heavily on the promises his seers read in the planets and stars.

Down through the ages the stars were studied, omens and portents were "read" by seers and astrologists. Something must be said for the time of year an infant was born. In the early days of our world, before central heating, refrigerated food and infant vitamin supplements, a child born in the winter had a very slim chance of survival. His mother who nursed him had access only to root vegetables, nuts and berries to survive. But if the child survived and grew to manhood, he was sturdy, strong, had resisted disease, and was wise!

From these physical qualities emerged the values of self-reliance, courage, ambition, resourcefulness and kindness. We're sure many of you have read these descriptive words in horoscopes for the winter babies. This is not to discredit those of us born in the spring and summer. We had every advantage.

With these thoughts on horoscopes this writer looked into the calendar date of our United States presidents and discovered that of our 39 presidents none were born in June! Five presidents were born in November and six were born in October. The months of January, February and March each boast four presidents! Perhaps the struggle to survive physical rigor does include the mental stamina to surmount set-backs, and distractions.

Is this the way horoscopes came about? The ancients consulted the charts prepared by their astrologists; kings and rulers obeyed the bidding of their alchemist or oracle. Shakespeare's plays often allude to the stars, the planets and the omens they portend.

Whether or not the time of the year that we are born is significant, the aspect is a curious one. People will continue to read their horoscope' and perhaps even follow the suggestions in the daily news-

#### **Exchange Editor:**

AGNES HUETHER 34 Jacklin Court Clifton, New Jersey 07012 paper. They'll be advised that these entries are for amusement only...but there will be a vestige of belief and...wonderment? Our presidents Harry S. Truman and John F. Kennedy were both born in May. And the great genius Wolfgang Amadeus Mozart was born on January 27, 1756.

It was William Shakespeare who wrote, "...it is not in the stars, but in ourselves." In behalf of all the members of the Board and all the members of the Piano Technicians Guild Auxiliary, let me exchange all good wishes for a healthy, happy and prosperous Thanksgiving.

My father always had a special little toast he enjoyed proposing at the Thanksgiving dinner table. I'd like to share it with you.

May you always have an Eagle in your pocket, A turkey on your table, And Old Crow in your glass!

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#### **Your Board of Directors**

Deanna B. Zeringue Vice President

My name is Deanna B. Zeringue, and I am married to Nolan P. Zeringue, the South Central Regional Vice President of PTG. We have four grown sons, two still at home and two married. We also have one granddaughter named Shannon, age 4, whom I baby-sit every day.

I worked for 6 years as a paraprofessional with Special Ed students in elementary school, and resigned to work in our business when Nolan went into business for himself. I take care of the office and help in the shop. Our business is not only pianos, but includes the repair of band instruments. I have learned a lot about taking pianos and band instruments apart. The shop is in our house, and the shop hours are never nine to five.

I like to read books about health and cooking. I like to try out as many new recipes as I can on my family, and most of them turn out to be pretty good, especially the cajun cookin'.

When I can find time, I do aerobic exercises and spend time at the gym. Now I am trying to get back into weight training.

I have been a member of the Auxiliary since 1977. At that time New Orleans had the beginnings of a PTG Chapter Auxiliary, and now I am listed as a member-at-large for the state of Louisiana. I have traveled to every Convention since 1977, and I also attend the seminars in the South Central Region with Nolan.

# ON TOR-ON-TO!

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#### PIANO TECHNICIANS GUILD

# **UPDATE**

November 1986

## Groundwork Laid For Toronto Convention

The theme for next summer's annual Piano Technicians Guild Convention and Technical Institute will be "Toronto — Discover the Feeling!"

Theme selection was one of a number of issues discussed during the Guild's 1987 Convention Planning Meeting, which was Sept. 10-11 in Toronto's Constellation Hotel, site of the convention. Convention dates will be July 20-24, immediately followed by a two-day meeting of the International Association of Piano Builders and Technicians.

Those attending included Guild President M. B. Hawkins, Vice President Ronald L. Berry, Secretary-Treasurer Robert Smit, Northeast Regional Vice President William Moonan, 1987 Institute Director Richard Bittinger, Auxiliary President Ginger Bryant and Western Regional Vice President James G. Bryant. Toronto Chapter members attending the meeting included Host Committee Chairman John Lillico, President Steve Jackson, and Ken Bryant. Barbara Parks, Rosemary Hall and Larry Goldsmith represented the Guild's Home Office.

Those attending the meeting reviewed last summer's successful convention in Caesars Palace in Las Vegas. Final registration figures were 902, including 630 Guild members, 120 non-member technical registrants, 86 Auxiliary members, and 57 non-members who participated in the Auxiliary program.

Committee participants also toured the hotel with an eye toward the logistics of next year's convention and discussed modifications in the convention schedule which might be necessary in 1987. Fees were set at \$90 for Guild members, \$120 for non-members, \$40 for Auxiliary members and \$50 for Auxiliary non-members, all in U.S. dollars. Canadians attending the convention may pay registration fees in Canadian dollars, with the fee based on the exchange rate at the time registration materials are printed. Fees for late and onsite registrations will be \$20 additional for Technical Institute registrations and \$10 extra for the Auxiliary program.

Committee members also met with Ian Desjardins of Mendelssohn Commercial Ltd., the convention customs broker, and Susan Montgomery of Canadian Customs, regarding bringing educational and display materials across the Canadian border. Both assured the committee that difficulties would be minimal.

# Committees Request Nominations, Proposals

In compliance with the Piano Technicians Guild Bylaws, the Guild Nominating Committee requests nominations for all 1986-87 elective positions on the Guild Executive Board — President, Vice President, Secretary-Treasurer and all Regional Vice Presidents.

Chapters may submit nominations, and any member in good standing may offer his or her own name for consideration by this committee. When nominee suggestions are received by the committee, the proposed member will be sent a consent-

to-serve form and information on the duties of the office. Each nominee may submit no more than 15 lines of typed qualifications to the Nominating Committee for consideration, together with the signed consent-to-serve form. The committee will prepare a list of nominees showing its selections for President, Vice President, Secretary-Treasurer. All nominations received for the three offices and for the offices of the six Regional Vice Presidents will appear in the May 1987 issue of the Journal, together with the

committee's selections. In this way, the membership will be given information on every nomination received by the committee.

Please read the Guild Bylaws for full information on the required nominations procedure. Nominations must be submitted no later than Feb. 1 to Susan Graham, 2967 Madeline, Oakland, CA 94602 or call (415) 482-4707

Nominations for Guild Awards
— Golden Hammer, Hall of Fame

Continued on next page

# Who Can Use This Logo — And How

"Registered Technicians shall have the exclusive right to use the emblem herein depicted. This emblem may not be used or displayed by any company or corporation or in connection with any "dba" unless the Registered Technician's name accompanies it. The only exception is that it can be used by the Piano Technicians Guild in literature designed to explain it." — Piano Technicians Guild Bylaws, Article III, Section 3a.

Until last summer's Council meeting, the logo depicted here had been used for a number of purposes. Registered Technicians have always been able to use it in their individual advertising. In fact, they were encouraged to do so, although not enough did.

But the logo also has served several organizational purposes. It was used as the official emblem of the Piano Technicians Guild in all the organization's brochures, publications, banners, press releases, etc. It also was used by chapters and regional Piano Technicians Guild organizations for the same purposes.

According to the measures approved by the 1986 Council, the only legitimate uses for the logo are by individual Craftsman members advertising their own services and in articles such as this explaining and promoting the logo or its use.

The logo has been deleted from the *Piano Technicians Journal's* masthead and the front page of the *Update* section. All Guild brochures and business aids are being redesigned so that, when current stock is depleted, the logo will be accompanied by words explaining the term "Registered Tuner-Technician" and the process by which that title is attained. The logo has even been deleted from the Guild's new membership application and reclassification forms.

The words "The symbol of a Registered Tuner-Technician" have been added to the logo as used on the Guild's official letterhead. That use, by Guild officers, committee members and home office staff in correspondence with members and people outside the organization, can only increase familiarity with the logo and its meaning.

Chapters, conferences and individual members should reexamine their own uses of the logo. As passed by Council in July, the Bylaws are very clear: besides individual RTTs' advertising materials, the logo can be used by the Piano Technicians Guild and its chapters only in a few limited ways.

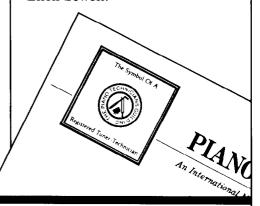
Limiting the organizational uses of the logo also puts more pressure on individual craftsmen to use the logo in their advertising. If the logo is to have any meaning to the general public and to the rest of the music industry, it must be promoted. Its lessened visibility as an organizational symbol must be made up for by use by RTTs in Yellow Pages, newspaper and direct mail advertising. Remember that it must be used with the name of an individual Registered Technician, not a business entity.

If the current logo is no longer a symbol of the Guild as a whole, what is? As it stands



now, the Guild's Bylaws and Regulations recognize no official emblem or logo. The words "Piano Technicians Guild, Inc." are registered with the U.S. Trademark Office; however, no visual usage of them has been specified. Traditionally, the organization's name has appeared in a serif typeface.

Do we need a new logo and, if so, what should it look like? That's another question, one for a special committee composed of Clayton Harmon, chair; Claudia Ellison, Colette Collier and Ellen Sewell.



## New Officers

North Central Louisiana
Eddie J. Melton, President
Gerald W. McCleskey, Vice
President
H. Dean Clark, SecretaryTreasurer
Howard F. Jackson, Program
Chairman
Elizabeth Ward, CTE

Youngstown, OH Richard Howenstine, President Ron Ore, Vice Presidentt Jay Reed, Secretary

Jay Reed, Secretary
Thomas Jarabek, Treasurer

Cleveland, OH

Kevin Leary, President Ken Sloane, Vice President Alan Nemeth, Secretary Janet Leary, Treasurer

Nashville, TN Candace Wilken, President

#### Committee . . .

and Member of Note — are due to Awards Committee Chairman Ernest S. Preuitt, 4022 South Fuller, Independence, MO 64052, by Dec. 31, 1986.

Proposed changes in the Guild's Bylaws must be received by Bylaws Committee Chairman Robert Smit, 17 Carmichael Court, Kanata, ON K2K 1K1 Canada, by Jan. 1, 1987.

## A Matter Of Recognition: Credit And Publicity

#### Dan Skelley Teacher Relations Committee

Here is a situation in which many of us have found ourselves, and which for me has proved to be an interesting dilemma. A musical club is having a recital at an institution on a piano not owned by the club. The piano (as usual) is in need of regulation, repair and voicing, but the institution is not interested in paying for the work because they are not sponsoring the concert, and the musical club is not interested in paying for anything other than a tuning because they are not interested in investing in a piano that is not theirs. The piano technician is in no mood to give any free

work, but because it is really necessary, and he somehow feels his reputation is at stake, he does it anyway and resents every minute of it.

Recently here in New Orleans, there was a very similar situation that has allowed me to reorganize my thinking about the technician's role in a solo piano recital. The "club" was having their annual keyboard festival which consists of one week's worth of piano recitals at a local university. The piano was a concert instrument that I had never serviced before and even though I was assured that it was "in pretty good shape" and "just needs tuning" I knew better than to believe it. When I suggested that my name be printed

in the credits of the programs in return for performing the needed concert preparation, I met with an agreeable and understanding response. All three parties seemed satisfied with the situation. The University has an improved concert instrument, the musical club only paid for the tunings, and I received credit and publicity.

This is all well and good, but closer examination brings up the question: why did I feel as though I had to pay for the "publicity" with my repair work? Why could I not receive credit simply from being a part (a major part) of the concert's

production?

This has been a question that has bothered me for a few years now and one that I think shows the more passive nature of our profession. My personal feeling is that there are many reasons for piano technicians to be given formal recognition. Do stage personnel or makeup artists have that much more professional status than the piano technician that they be given this recognition and the piano technician not? I doubt it. At one of our local universities there is a thank-you note on every program to the dealer, simply for having sold the piano. Does the piano manufacturer or dealer contribute that much more to a recital than the technician?

There seem to be countless times that I have been approached by someone while tuning for a recital with the question, "Does it go out of tune that quickly? It was just tuned last month." This is just another indication that concert-goers often don't know that a piano needs preparation before a concert can take place.

Our connection with PTG shows that we as individuals and as an organization are committed to raising and maintaining a professional musical standard. This is one way that we can help the music appreciator share our enthusiasm for the pianos we care for.

## Chapter Notes

Los Angeles

At our September meeting Teri Powell gave a very fine review of changes made in our national bylaws, etc. as such decisions were made in the Las Vegas convention. Our technical speaker for the evening was Jim Harvey, technical consultant for the Kawai Piano Co. He spoke first of the problem of humidity as the piano leaves the west coast and is used in various parts of the country under all different kinds of climates. He said the most common causes of buzzes or noises are in the lock of grand pianos and sometimes in the hinges, then in verticals it is sometimes in the bottom board. These are the unusual places. A buzz in a bass string is sometimes caused by twisting the string too many turns. Rim bolts should be checked to avoid any peculiar noises in the plate or around the rim of the piano. Perchlorethelene is good for cleaning knuckles and other parts in a piano. The duplex bar is not intended to make the tail piece of the string an octave higher or the same pitch as the speaking length or even to be a

partial thereof. In fact, many pianos have no duplex bar at all. Intertwined with the above serious information, Jim mingled in a good deal of humor. It was an interesting program.

— Harry Berg

Reading-Lancaster

The chapter has taken on as a project a piano with a cracked plate which was given to the chapter. We are planning on experimenting with welding the plate and making a videotape of the procedure which could be presented as a technical at meetings and such. Assuming the project is successful the piano will be sold and the money put into the chapter treasury. Our banquet committee is also busy planning our annual banquet for Nov. 7 at which this year the Reading-Lancaster Chapter will celebrate its 25th anniversary. Our September meeting was held in Allentown at Zeiner's Piano Shop. After the business meeting, John gave a tour of the shop to those who hadn't seen it before and then presented a technical to the chapter.

— Jim Bittinger

# Selling Yourself And The Piano Technicians Guild

#### Dick Bittinger Reading-Lancaster Chapter

All of us from time to time must deal with the customer who has just acquired a piano. Whether it is new or used, the person will often have a few questions about its care. How can you remember to tell them all the dos and don'ts and still keep your schedule?

The best thing is to assure them they made a good start by getting it tuned by a member of the Piano Technicians Guild. Then hand them the little brochure called "Care of Your Piano." Suggest they read it and share it with the rest of the family. Tell them your name and phone number are on the back. If they need more information, you are available at that number to talk with them. The brochure even tells them about the Piano Technicians Guild!

Remind your chapter to send for the slide presentation of 'Business Aids."

#### Things to DO for Your Plano

Always keep your plane in tune. Have it tuned two to four times a year to keep it at the standard pitch of A-440. (Ask a member of the Plane Technicians Guild to explain "A-440" to you)

Keep your plano clean. Close the plano when dusting or sweeping Have a member of the Plano Technicians Guild completely clean to the invalidation of the plano Technicians Guild completely eccording to his tecommendations for your climate and geographic location. You may occasionally wige the linish of the case with a damp cloth to remove lingerprints, or polish with a reliable brand of cream polish, following the instructions of the polish manufacturer.

Keep the keys clean by wiping them with sidemp cloth. If there is soil on the keys which a damp cloth will not remove, wipe the cloth across a cake of Ivory soap, then rub lengthwise along the top of the key until the spot is gone. Dry with a soft cloth. Do NOT USE ANY SDUENTS OR CHEMICALS to clean your piano keys. Ask the advice of a member of the Piano Technicians Guild.

Replace a loose Ivory as soon as possible. Call a member of the Plano Technicians Guild as he has the proper clamps and glue to do the job as it should be done.

Use your plano regularly and enjoy it. Idle planos are only space tillers and they deteriorate more rapidly than planos in use.

Do try to maintain a fairly even temperature and humidity in the room containing your plane.

Select your plano technician with the same care you select your physician or any other professional service Consult your classified telephone directory for the name of the nearest member of the Plano Technicians Quid You will find a skilled, courteous and reliable professional ready to help.

#### WHAT IS THE PIANO TECHNICIANS GUILDS

The Piano Technicians Guild is an interna-The Piano Technicians Guild is an interna-tional nonprofit organization for skilled pro-fessional piano technicians who are the foremost piano craftsmen. Membership as a Technician is only acquired by toremost piano cralismen. Membership as a Registered Technician is only acquired by passing rigid examination. It is the aim of the Guild to maintain the highest level of profes-sional skill, and its purpose is to provide plano owners with an accredited service, readily available, and thoroughly dependa-ble.

ble. Protect yourself and your plano by always engaging the services of a plano technician who carries a current Guild membership card for identification as a Registered Technician. You can trust the Plano Technicians Guild for quality plano maintenance, repair, rebuilding and tuning.

Published in the interest of better music through her-ter serviced pianos by: The Piano Technician, Guid-Inc., 9140 Ward Porkway, Kansas City, MO 64114.

COMPLIMENTS OF

CUIL PIANO TECHNICIANS

#### Brochure 1/2 actual size

It is to your financial and cultural advantage to take good care of your piano. It probably to take good care of your piano. It probably expressed to the largest investment in music your home and such an investment in music should be protected by keeping your piano should be protected by keeping your piano in responsive regulation, in good voice and well tuned.

The piano is normally an instrument of long the Abuse, not use, is too often responsible life Abuse, not use, is too often responsible in Abuse, not use in oil is sensitive inner for quick deterioration of its sensitive inner mechanism, and neglect—the faiture to mechanism, and neglect—the faiture to mechanism and negless kind of abuse. Your piano should needless kind of abuse. You piano should needless with the piano fechnicians Guild to explain "Art piano fechnicians Guild to explain "Art piano fechnicians Guild to explain "Art piano fechnicians" regulation. Its hammantained in proper regulation. Its hammantained in proper regulation.

The action of a piano (its playing mecha-nism) is a marvel of engineering which needs nism) is a marvel of engineering which needs to be kept in adjustment as accurate as any watch. Yet the intricate parts of this mecha-nism are sturdy and designed to absorb the nism are sturdy and designed to absorb the hardest blows a pianist's strong as they are deliver, year after year, as long as they are kept in repair and in the proper relationship to each other.

When a piano leaves the factory, each of its small parts is regulated to a tolerance of a small parts is regulated to a tolerance of a lew thousandins of the housanding stranger after striking escapement of the hammers after striking the sounding strings, is worthy of special the sounding strings, is worthy of special the sounding strings, is worthy of special the sounding strings, is the playing of all music.

Each key is custioned by fine felts carefully selected for resilience and durability. But in selected for resilience and durability and time even the best grade of felt packs more densely, permitting the "key dip" to deepen and disturb the inter-relationships of the and disturb the inter-relationships of the pands shidden parts. Wear and poor playing result.

A qualified piano technician, such as a member of the Piano Technicians Guild, has the ber of the Piano Technicians Guild, has the however the piano the piano the piano to allow the adjust these important paties or, If done at 10 regular intervals, the cost is minimal, but if regular intervals, the cost is minimal repairs neglected, the expense of eventual repairs neglected, the expense of eventual repairs necesses. Regular piano service and minimizeases. Regular piano service and mainimize and moths, and insures your musical mice and moths, and insures your musical investment by preserving the playing ability and lovely tone of your piano.

Excessive dryness and extreme humidity are both harmful to a piano. Excessive dryness lowers the moisture content of the ness lowers the moisture content of the soundboard and weakens the gue joints which hold the luning inntblock together which hold the luning inntblock together with hold the luning inntblock together which hold the luning inntblock together which hold the luning inntblock together a boundboard, and causes and distorts the soundboard, and causes and distorts the soundboard. And cause the latest the same climatic continuous best under the same climatic conditions suitable to human health.

Place your piano's health in the hands of an expert to guard the piano's inner and outer beauty. Trust a member of the Piano Techbeauty. Trust a member of the Piano Techcians Guild for quality piano maintenance, repair, rebuilding and tuning.

Things NOT to Do to Your Plano

Don't place your plano close to a healing outlet
new the control of the control

movers. You will avoid the service of the service o