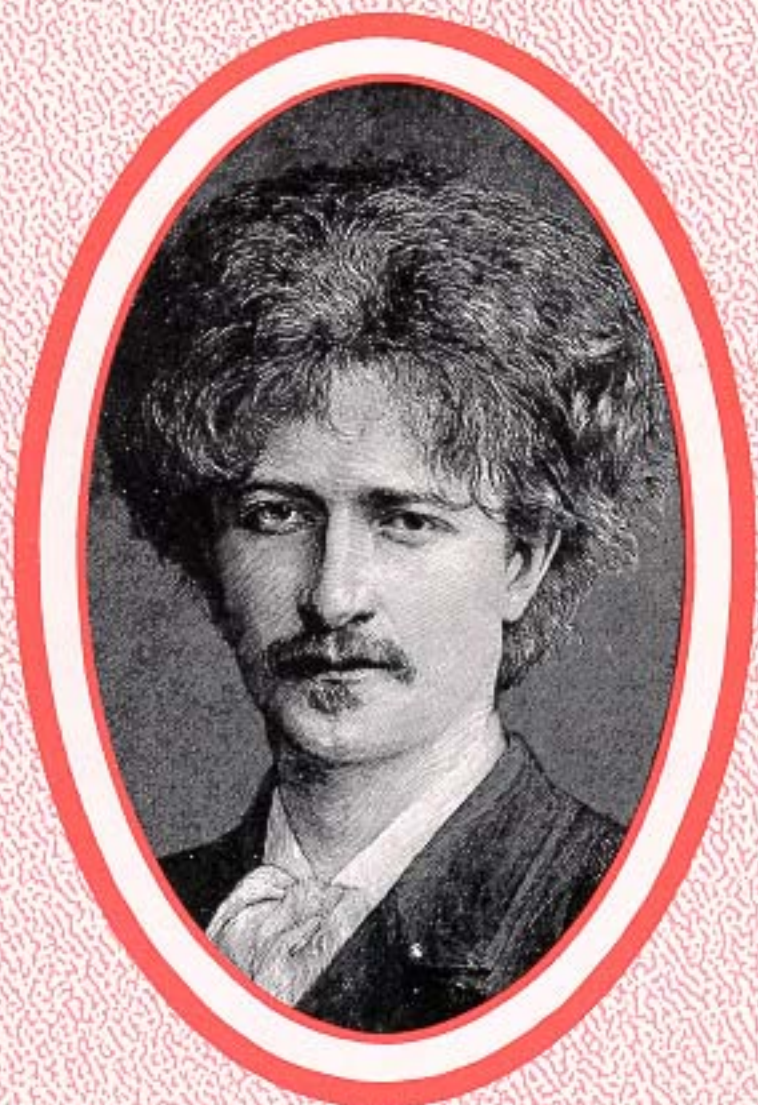


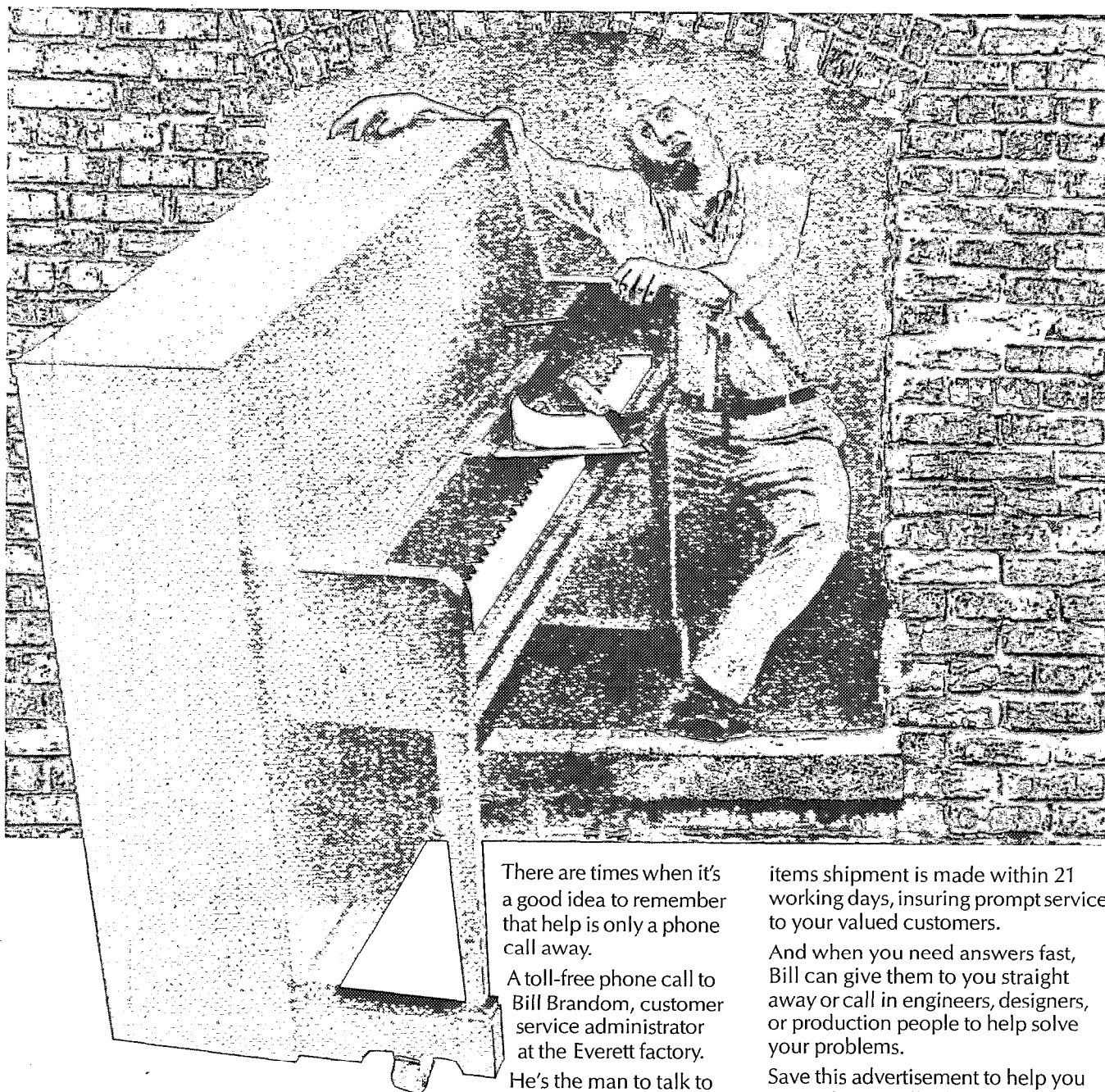
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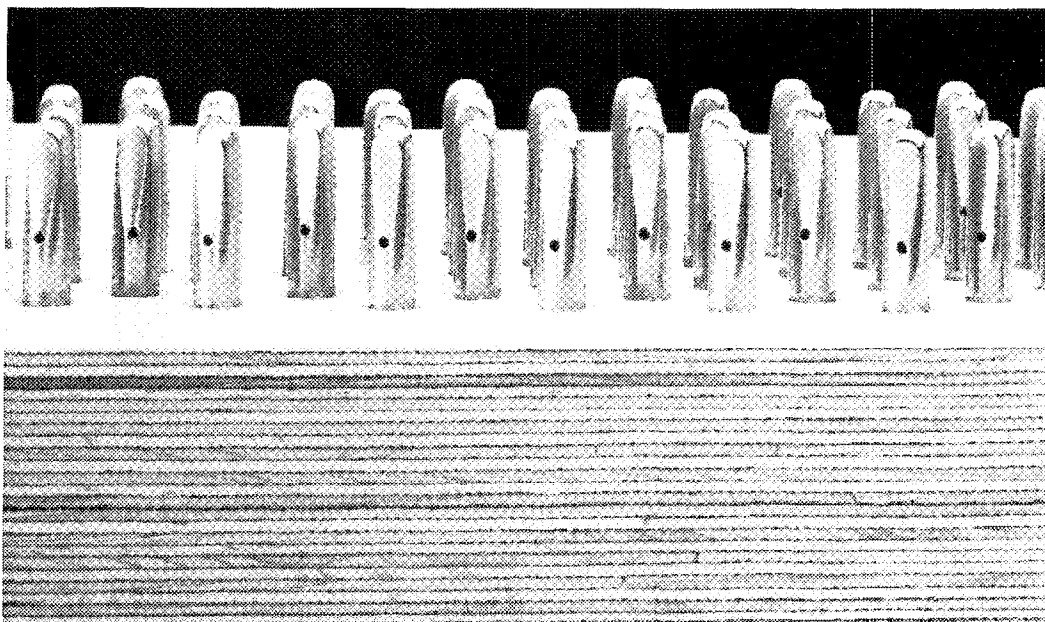
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# Piano Technicians Journal

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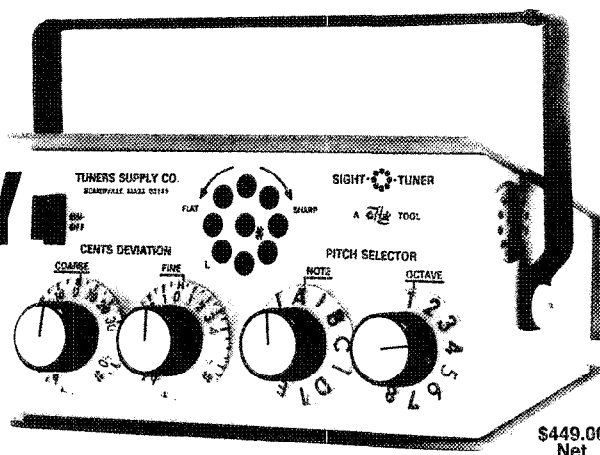


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# EDITORIAL

Don L. Santy,  
Executive Editor

Heard a speech recently by Cornell C. Maier, Chairman of the Board, President and Chief Executive Officer of the Kaiser Aluminum & Chemical Corporation.

Mr. Maier brought out some observations you might find interesting. He was talking about "survival in our system." Now he was careful to point out at the onset that our "system," while not without its flaws, is still one of the best in the world and one most Americans wouldn't trade for a truck load of wishes. In spite of a devastating war in Vietnam, the shock and shame of Watergate, assassins attacking our national leaders and serious inconsistencies in our criminal justice system, we should, as a mature and intelligent people, accept the good with the bad and constantly strive to improve and upgrade our lot.

He stated that businessmen today must realize that there is more to a financial statement than just profit or loss. They must learn to deal with three potent forces prevalent in today's business climate—"Government," "The Media," and "Public Opinion," three forces which can mold and shape our daily business lives with deadly effect.

He quoted Albert Einstein as saying, "Education is all that remains when one has forgotten everything he learned in school." Businessmen soon learn that government today demands huge blocks of time from management. In days gone by managers devoted most of their time to operational problems and to creating market opportunities. Today managers and executives use that time to report to government, explain to government, argue with government, rationalize with government and conform to government regulations. He further explained, "Our government bureaucrats wonder why our production is falling off, why inflation is continuing, why unemployment is up, and why investments are down. The key to bringing this vicious cycle rests with two forces, the media and public opinion." It is a serious mistake, he states, to believe that if we play a low profile and just maintain the bottom line everything will take care of itself.

Mr. Maier believes that our problems today may appear to be energy, productivity, unemployment and an inflated economy, but our REAL problem is political.

"If our politicians, from both parties, had the courage to make the decisions that would allow us to develop our energy resources . . . if

they had the courage to make the decisions that would allow us to increase productivity, cut unemployment, and dampen inflation with a healthy economy . . . if they had the courage to make hard decisions in the national interest, rather than their own self-interest — our future would never look brighter.

"To quote Joseph F. Clarke, whose observation one hundred years ago is just as appropriate today: "A politician thinks of the next election . . . a statesman of the next generation. A politician looks for the success of his party . . . a statesman for that of his country." I am afraid that, with rare exception, we are being led by politicians, and not statesmen. And you and I are to blame for that, because we are the ones who tolerate a system forcing them to think of the next election, instead of the next generation."

Finally he discussed TRIAL BY THE MEDIA. The media all too often decides the innocence or guilt of a party. Once the publicity is out and the "wrong" stated in the press or on the air, what good does righteous indignation and protestation do?

Oliver Wendell Holmes said, "The first defense of an innocent man, unjustly accused, is righteous indignation. When I don't see it, I'm suspicious." How then does a man express his righteous indignation? It is a faint sigh in a forest compared to the might power of the media. He can protest and protest and he will still be judged "guilty as charged" through the papers and the television media simply by appearing.

Now is the accused happened to be a "big business" or an individual of considerable wealth he can fight back

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and dilute the publicity and perhaps even get a fair trial from the public. He cited the case of the "20/20" program attacking his industry with accusations of "aluminum wire" as an unsafe product manufactured by his firm. Fortunately his company had the resources and the money to set the record straight, but it took lots of both to bring it about.

When Mr. Maier finished his speech and while I was on my way back to the office musing on the pressures of survival in the modern business world, I reflected on the philosophy of Lin Yutang when he wrote: "True enough we all have obligations and duties towards our fellow man, but it does seem curious enough that in modern, neurotic society, men's energies are consumed in *making* a living and rarely in *living itself*. It takes lots of courage for a man to declare with clarity and simplicity that the purpose of life is to enjoy it!"

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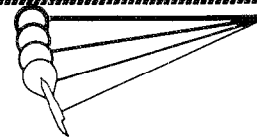
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# A. Isaac Pianos



## Reader Feedback

Dear Mr. Santy,

In our loss of Henry, my three sons and I have been comforted in (fellow Guild members') sympathy. (Their kindness of caring and understanding have been a source of strength and courage in our time of sorrow.

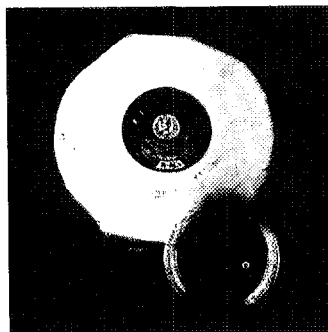
I trust time will heal our sadness and we will be blessed with peace of mind and sustained in the beauty of loving memories. Although I know he has gone on to his reward, the memories of sharing and enjoying our lives together for 34 years will live in my heart.

The Piano Technicians Guild has enriched Henry's life for over 22 years. He loved his many friends, appreciated his talented teachers, and delighted in helping others by sharing his interest and knowledge of pianos. This friendship was his treasure.

Sorrow is not forever. Love is.

Ruth MacConaghy,  
 San Diego, CA

P.S. Knowing Henry, he will probably learn how to tune harps.



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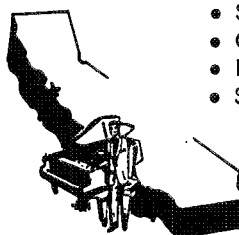
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# PRESIDENT'S MESSAGE

Sid Stone, President



"The President (of the Piano Technicians Guild) shall be the head of PTG and shall be its official spokesman; serve as Chairman of the Council

and the Executive Board; make all non-elective committee appointments . . . and exercise a general supervision over all affairs of PTG."

So states Bylaw Art. IX, Sec. 9, par. "a". This is a sobering responsibility the members of PTG have entrusted to me. As stated in my acceptance address on the last day of the Convention in San Francisco, my personal goal is to be a good listener. I promise to try and understand you and your viewpoints. Constructive criticism is not only welcome but also essential if we are to make progress.

We have one of the best Executive Boards we have ever had and the members on the various committees were carefully chosen to give you the best possible service. Do not hesitate to call upon them for information, or with your suggestions for improvement of Guild operations.

Perhaps the outstanding committee this past year was the Examination and Test Standards Committee.

Under Ron Berry's leadership this committee accomplished an extraordinary assignment given to them at last year's council meeting.

One of the most important committees in the next few years will be the Public Relations Committee. More will be said about this in later issues, but I wish to project a long-range goal for this committee and for the entire membership: By the year 2,000, 95 percent of the American people will have heard of the Piano Technicians Guild and 90 percent of the piano owners will use only PTG members to service their pianos!

There will be short-term goals dealing with public relations, membership, chapter program development and others. There is no such thing as standing still. We must go forward or we go backwards. With your help these goals can be accomplished.

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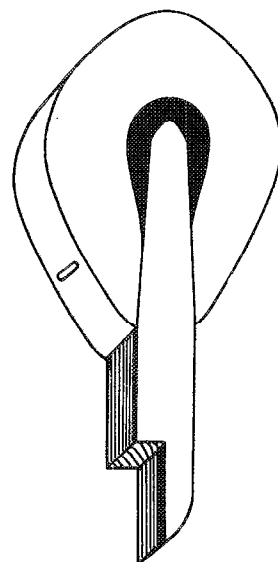
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# PARLIAMENTARY WISE

Answers to the questions are in accordance with *Robert's Rules of Order*, Newly Revised, RONR. When sending questions to the *Journal*, please quote any local chapter bylaw or rule which affects the subject.

**Question:** *We have a rule on the books but not in the bylaws. How long does it stay on the books?*

**Answer:** It sounds as though the rule is a standing rule in your chapter. It will remain in effect until a motion is proposed and adopted which changes or removes the rule.

**Question:** *Does a change of officers (such as an annual election) cancel out rules adopted during their term of office?*

**Answer:** No. Action by an assembly can only be changed by the assembly. Therefore, rules adopted remain in force through any change of officers until further action on the rules is taken by the membership.

**Question:** *How does a standing rule get on the books?*

**Answer:** A standing rule is a motion adopted by the members establishing a permanent procedure to be followed until the rule is formally amended or rescinded. Any motion which has a continuing effect (i.e., is intended to be permanent procedure) automatically becomes a standing rule upon its adoption — when a majority votes in favor of the motion (for example, a motion establishing that an annual summer picnic shall always be held in June, or a motion requiring the committee chairman to hand all committee files to the incoming president at the annual meeting). All standing rules should be listed and each member should have a copy.

**Question:** *How do we remove a standing rule?*

**Answer:** Propose a motion to rescind the rule. A two-thirds vote is required to rescind or remove the rule.

**Question:** *Who has the right to rescind a rule?*

**Answer:** Any member has the right to propose that the rule be rescinded. Only the members have the right to determine whether the proposal shall be adopted or rejected.

**Question:** *We voted to spend \$25 on a gift for a special member. How can we increase the amount to be spent?*

**Answer:** Move to amend the motion to buy the gift by striking out \$25 and inserting \$. . . A two-thirds vote is required to adopt an amendment to something which has already been adopted by the members.

**Why?** The principle is that while most main motions can be adopted by a simple majority vote, a stronger vote is required to authorize a change. For this reason, a two-thirds vote is required to rescind or annul previous action, and also to amend or change the previous action.

**Question:** *When may a member ask a question of another member when there is business on the floor?*

**Answer:** It is always in order for a member to ask a question, provided that the answer is necessary in order to take an intelligent part in the business under consideration, and provided that the question is of such importance that it cannot wait until a later time.

Note that all questions must be made to or through the presiding officer even though directed to a member. The member responding should do so through the presiding officer and not turn to the questioner when answering.

**Question:** *Does a member have the right to name who shall be appointed to a special committee which has just been approved?*

**Answer:** Yes, provided that the bylaws of the chapter have not established that the president is to appoint all committees.

**Question:** *We are not always able to get a quorum (half the members)*

*to attend the business meetings. How can we have regular business meetings which are legal without a quorum?*

**Answer:** Each chapter has the right to establish for itself what the quorum for its meetings shall be. It is not a requirement that the quorum be half the membership. Review the number who regularly attend and set the quorum at that figure — a percentage of the membership, a definite number, etc. Bear in mind that, if just the quorum attend a business meeting, a majority of those who vote in that quorum can act for the chapter, so do not set your quorum too low.

**Question:** *What is the difference between a standing rule and a directive?*

**Answer:** A directive is a form of order or instruction issued by the membership to an officer, committee member, etc. A directive is self-limiting and therefore an anticipated completion time is specified or implied, even though the date may be sometime in the future (for example, a directive to the treasurer to pay a bill, or a directive to a special committee to be responsible for the chapter's participation in a major joint meeting to be held in the next year).

A standing rule remains in force until action is taken to amend or rescind it.

**Question:** *Is it correct to sign a report "Respectfully submitted"?*

**Answer:** It is considered unnecessary and no longer the custom.

**Question:** *Our chapter took action on some business and, although a majority voted in favor, I wanted to go on record as being opposed. What could I have done?*

**Answer:** A member may request that the minutes show a negative vote was cast by the member on that motion. It will not affect the vote, but does indicate a strong feeling on the part of the member with regard to that particular motion.

# THE TECHNICAL FORUM

Jack Krefting, Technical Editor

I am delighted to announce that Susan Graham has consented to write a series of technical articles for us. Those of our readers who have been receiving the newsletter of the San Francisco Chapter are already familiar with Susan's technical expertise and writing style, and now she will share that with all of us. Her series will be entitled *Shoptalk*, the first article of which appears in this issue.

Susan's series will not be a replacement for the excellent "Werkstatt" series by Priscilla and Joel Rappaport, which will continue as soon as the Rappaport's hectic rebuilding schedule slackens enough to allow a little time for writing. In addition to their regular work, they were rebuilding an older Steinway D for use in the OE Van Cliburn Competition when their last two writing deadlines fell due; that piano, incidentally, had a big, beautiful tone and was played by the winner of the Competition.

## BIRDCAGE PIANO

**QUESTION:** *Responding to a request for tuning I was surprised to find an English made John Brader & Sons, Swansea, 8&9 Wind St., Est. 1840. 85 keys with a "bird cage" action. The piano is in good condition but I doubt if it has ever been tuned. I have not the slightest idea how to accomplish this feat let alone adjust the dampers. Got any ideas? Would appreciate your advice. Thanks much.* —M.J. Ott, South Whitley, Indiana.

**ANSWER:** Some detail on tuning these instruments was published in the Forum in the July 1979 issue, and further discussion followed in December 1979 and May 1980. To summarize, the tuner is faced with

four choices — muting below the keybed, muting through the action with thin stick mutes, tuning without dampers and pulling the action to strip mute the piano.

Most of the scale can be muted from below, using a long, thin strip of felt. Leave a long (about 180 g) tail on the temperament strip, protruding from the highest unison muted from below, and leave that tail on your lap for ease in pulling it out as the unisons are tuned. The high treble can be muted in the normal way. Using this method, it is possible to mute almost the entire piano.

For a description of muting with sticks through the action, please refer to Bert Blackhurst's method in our December 1979 issue. The third method involves opening a catch at either end of the damper rail and removing the dampers from the piano. Then it can be muted in the usual way, although tuning without dampers can be frustrating at best. The fourth method, suggested by our talented illustrator Jim Campbell, involves removing the action and strip muting the strings. After all of the center strings have been tuned, again rock the action toward the keys and pull every loop from between unisons. Tune the strings thus undamped to the tuned center strings, and then pull the entire mute out from one end and tune the rest of the strings. I have not tried this method, but Campbell says it works well and isn't too much trouble.

Adjusting the dampers isn't too much fun, either, because the over-damper design is inherently inefficient; indeed, sometimes the best that can be hoped for is a general evenness of tone leakage, especially

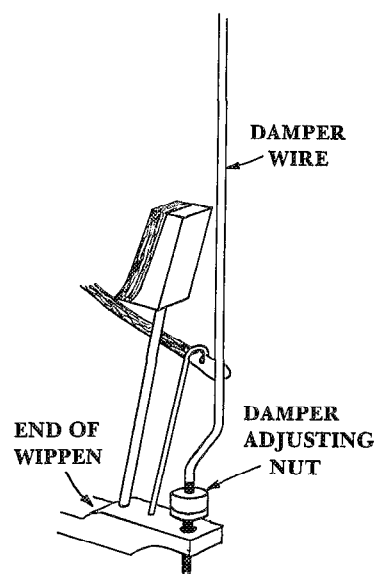


Figure 1

if the tone is decent and the ring reasonably long. There is little enthusiasm to be mustered for such a job, knowing from the outset that one's finest efforts are likely to result in bare adequacy of performance.

There is one bright spot, though. Since there are no damper levers behind the action, there are no spoons to find and bend. Damper lift with the key is adjusted by means of turning leather nuts on the threaded lower ends of the birdcage wires (see Figure 1). These nuts are readily accessible and be turned easily with the fingers.

Adjusting for lift with the pedal is accomplished by bending the L-shaped wires that lead to the damper blocks. Bend the upper part, near the lever, first; this will allow the damper to lift at the same time as its neighbors. Then bend the lower part so that

# The Baldwin Piano...

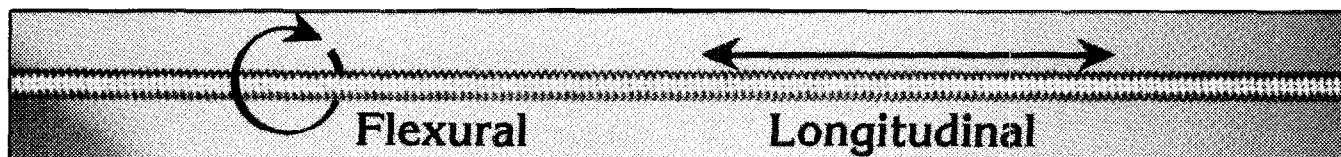
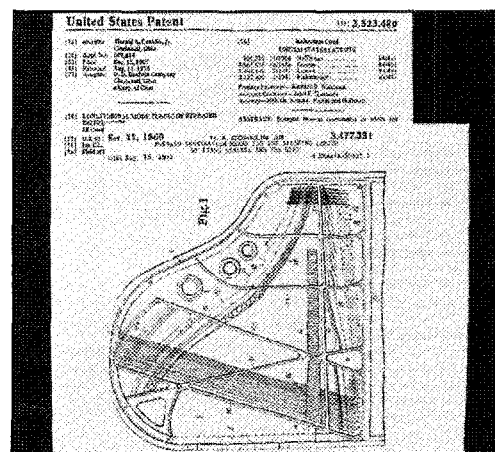
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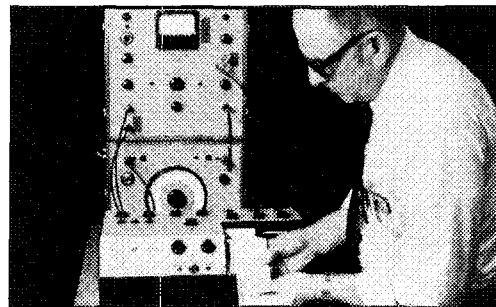
When a string is set in motion, two distinct groups of tone components are produced. The predominant group involves the flexural mode, which has always been the basis for stringed instrument design. The longitudinal mode is less audible but still present in every vibrating string.

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the felt touches evenly at the top and bottom. When replacing damper felt, much regulating time can be saved by taking care to use felt of the same thickness as was originally used, as I discovered to my sorrow on one occasion.

Because of their undeniable eye appeal to antique buffs, birdcage pianos are being imported by the containerload. Auctioneers and antique dealerstend to grossly overstate their potential musical value by assuring their customers that these pianos are "unique", "handmade", and constructed of "solid wood". Worst of all, the seller often asserts that his beautiful little jewel "just needs tuning".

### STRING SIZZLE

**QUESTION:** . . . "I have a small Rauworth grand and have a section from about F above middle C to the next F up, in which there is what I call a 'sizzle' in the strings. I have put in new strings, but this didn't help. I have used emery cloth on the V-bar in case it is worn by the strings so that when played the string vibrates on the edges of the groove in the V-bar. . ."  
—Norman Duckworth, Duncan, British Columbia.

**ANSWER:** It is just possible that the bar had been resurfaced before, at which time the string grooves were removed. This would have had the effect of reducing the draft as well as the counterbearing angle, and might have changed the contour of the bar enough that the sizzling was inevitable, at least on a hard blow. The crown on the board tends to flatten with age also, which means that the bridge would be lower in relation to the V-bar, especially in the middle. That wouldn't change the counterbearing, at least not directly, but it would lessen the draft angle. Given that hypothetical set of circumstances, resurfacing the bar and restringing the section would not eliminate the sizzle.

I would suggest a close inspection of the V-bar with a good light and a mirror, preferably a make-up mirror that magnifies the image. If the contour of the underside of the bar is flatter in the trouble area than elsewhere in the scale, the bar probably needs to be reshaped to a smaller counterbearing by inserting a piece of brass rod under the strings between the tuning pins and the V-bar.

For those readers with less experience than our correspondent, we

might suggest that the procedures described above should not be attempted until it has been definitely established that the noise is coming from the front termination point. There is nothing unprofessional about calling someone else to offer a second opinion — doctors do it all the time.

### TOUCH RESISTANCE

**QUESTION:** "Some brands of pianos (particularly some consoles I have in mind) have definitely too much resistance to the touch. Is it ethical and safe to weaken the damper level springs to lighten the touch?" —Ben Accardi, Bridgeton, Missouri.

**ANSWER:** Under normal circumstances, no. I suppose there could be a situation where someone had put extremely strong springs on the damper levers in an attempt to cure a damping problem; but weakening them would still have a relatively minor effect on the feel of the action unless the spoons were misregulated so the dampers were lifting immediately. By the time the spoon touches the damper lever, if everything is correctly regulated, the key is already about halfway down and its momentum minimizes the feel of the damper spring.

I assume that Ben has already eliminated all excess friction in the keys and action centers, which is usually the cause of heaviness in the vertical action. I would check the capstans in a direct blow action to be sure they are clean and smooth, and then I would check the regulation. If the blow is long and the dip short, it will feel heavy to the pianist.

Next, check the position of the hammer spring rail. If it is too high, judging by the position of the springs in the butt grooves, loosen its mount-

ing screws and lower it somewhat. This moves the point of spring contact closer to the butt center, thus weakening the spring effect and lightening the touch a little.

Finally, check the keys for lead. There might be weights in the back of the keys, either as part of the original design or added subsequently by another technician. If they have been crudely added, we might suspect that a previous technician tried to use weight to cure a friction problem, either through laziness or ignorance; remove these and the problem will most likely be solved. But if the leads were installed by the manufacturer, think twice before tampering with them. In that particular design, the lead is probably necessary for repetition or the maker wouldn't have installed them in the first place.

Before going too far, it would be wise to check the actual touch weight to see whether the customer's complaint is even valid. We would measure the amount of weight needed to slowly move the key partway down (until the spoon touches the damper lever), not the amount necessary to bottom the key. If the action is in the 45 to 55 gram range, it is probably within factory specifications.

Bernard has another question, this one in reference to a voicing demonstration at the Missouri State Seminar.

### VOICING

**QUESTION:** "When you were giving your demonstration on voicing, when you were through with a particular hammer you struck it and said that the tone had come down. Also that the hammer was ruined for good.

"Does this mean the tone will not become harsh again? Also, I must say that I didn't hear any difference (although I was in the back of the room).

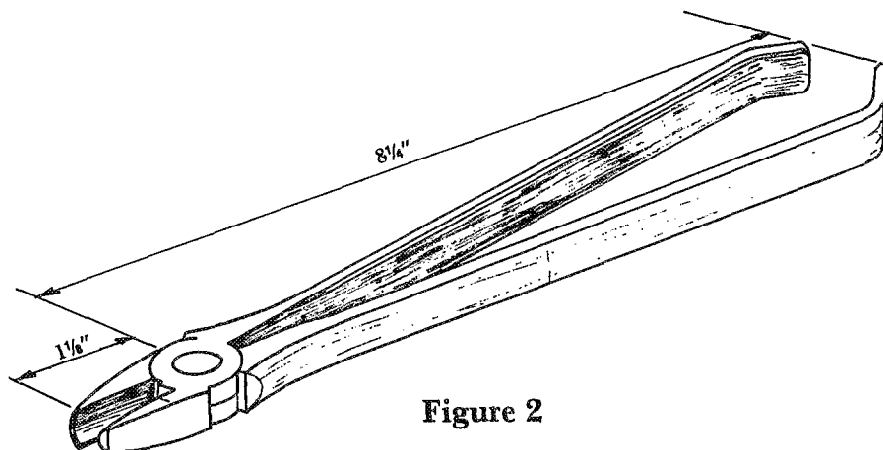
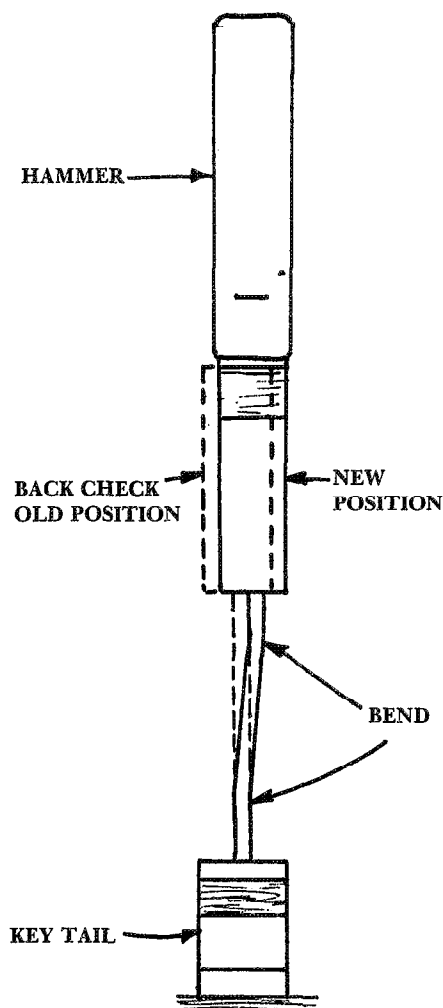


Figure 2



**Figure 3**

*Does this mean I am not sensitive to what I should be hearing? I have little experience in voicing and frankly don't hear any difference in tone unless I go over the striking point. Will you clarify this for me?"*

**ANSWER:** That particular demonstration involved a gradual needling and evaluation of a particular hammer in relation to an adjacent note, without regard to the overall tone regulation of the piano. We were comparing A against B, hoping to make a foreign hammer sound like the others in the original set. The needling definitely reduced the degree of harmonic development to my ear, but I was sitting at the piano and not in the back of the room. The sound could well have been different there.

Probably because of the acoustics of the room, it was difficult for all the technicians to hear the tonal difference as the demonstration progressed. A periodic polling of the class indicated that some thought the changes were obvious and even dramatic, while others felt that there was

little or no substantive change. Finally, in an effort to prove a point, I needed the hammer on the crown.

There are a few cardinal rules in voicing, but all of them bear a direct relationship to the way a hammer is constructed. We will discuss this in detail in another issue, but basically we are altering the tension/compression balance of forces within the hammer. Needling releases tension from the outside, softening the surface and thus changing the shape of the impression made on the string at the point of impact. Shallow needling affects the sound on a soft blow primarily, while deep needling has a profound effect on the sound when a hard blow is struck. One should never needle deeper than about 1/32" on the crown in any situation, because the closer the needles get to the crown the more devastating their effect becomes. We must remember that everything we do in tone regulating and voicing is ultimately destructive to the hammer.

The tone could well become harsh again, but not in the same way or for the same reasons. Soft felt packs more readily than hard felt, so the hammer that has been excessively needled will develop a flat top where it contacts the string. This not only changes the wave form, but also has the side effect of damping some of the higher partials even as it strikes the strings. The result is harshness of a type different from that of the hammer that is correctly shaped but hard as a rock. I think we will go into this in some detail next month. Our thanks to Ben Accardi for bringing up the subject.

#### BACKCHECK ADJUSTMENT

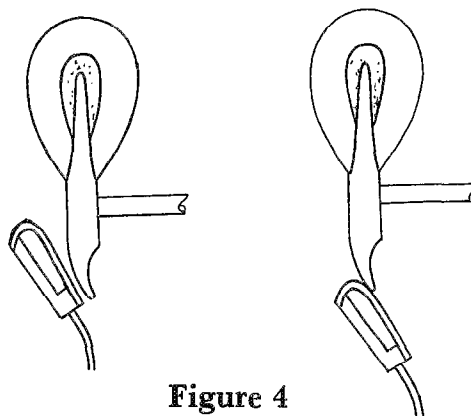
Several readers, including Mr. S. Maynard of Bronx, New York, have requested some discussion of wire bending as related to grand backchecks. The following is intended to cover some of the aspects of that adjustment.

There are many different bending tools available, but they fall into two basic types — those that are basically a piece of steel with a notch in it for setting the bevel, and the compound bending tools which align the checks in a side-to-side position to center on the hammer tails. My favorite in the latter category is a single-pivot tool pictured in **Figure 2** which is available from APSCO for \$40. This tool is designed for grand damper wires, but also does an admirable job on backchecks. Shorter tools with a double pivot are available for less money, but the technician has less control of the amount of bend with them, in my opinion.

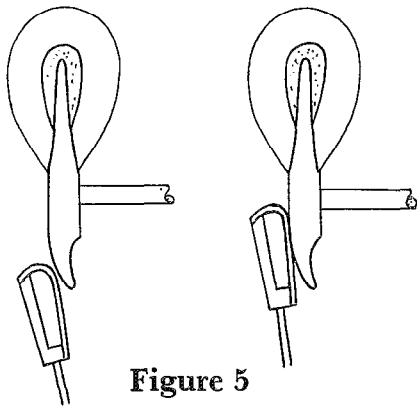
After spacing the hammers to the strings, the checks must be aligned to center on the hammer tails as shown in **Figure 3**. The bottom bend is made first, to space the backcheck to the side, and then the top bend is made to straighten the head of the backcheck. The hammer tails are "shot" or tapered so that they will be somewhat narrower than the backchecks, but they should be at least 2/3 as wide as the checks even at their narrowest point. When the side-to-side alignment is made, beveling can begin.

Beveling refers to the angle of the head of the backcheck, fore-and-aft, and for this discussion we are assuming that the hammer tails are shaped in a uniform manner, with the final shaping done after the hammers are hung and the shanks and flanges are mounted on the rail. The beveling is done with a notched rod which bends the wires for the proper fore-and-aft angle of the backcheck. To determine this angle we must experiment by bending one wire and watch the relationship of the check to the hammer tail.

Place one fingertip on the top of the hammer and the other on the keytop; rock the assembly back and forth, alternately pushing down the hammer and then the key, looking for the

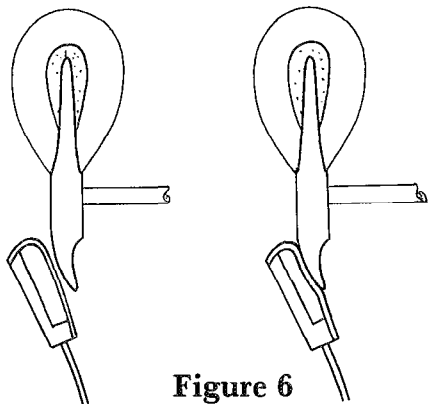


**Figure 4**



**Figure 5**

part of the backcheck that comes closest to touching the hammer tail as it passes. **Figure 4** illustrates that the tail comes closer to the bottom of the check than to any other part. The same illustration shows what happens when the hammer checks — it catches so high on the check that it will bounce back up into the strings on a soft blow, and the tail will dig a groove in the buckskin after repeated hard blows. The solution to this is not to reshape the tail like a toboggan, as is often observed, but to bevel the check correctly so that there will be more surface area in contact in all situations.



**Figure 6**

**Figure 5** illustrates the opposite situation, which is just as bad. In this drawing the backchecks are beveled in a nearly upright attitude, with the tails coming closest to the top part of the checks. On a soft blow the hammers will check nicely, but on a hard blow they will tend to drive down too far, which slows the repetition to a noticeable degree. **Figure 6** shows a better relationship between the profiles, with the tail passing closest to the upper middle portion of the check on the rocking test. It will check reliably with this bevel at every dynamic level except *pianissimo*. On a very soft blow with correct drop and good spring tension, reliable checking may be neither possible nor necessary.

Adjusting the backchecks for proper checking height is usually done with the thumb and fingers rather than with tools because of the subtle nature of this adjustment. For best performance, the hammers should check as high as possible without dragging on the backchecks on the way up when a hard blow is struck. To test for this, use the rocking test described earlier. The finger pressure on the hammer will approximate the amount of shank deflection that would occur on a hard blow; if there is no friction in the rocking test, it should be all right. The nominal measurement given by some manufacturers is 5/8" on a moderate blow.

As with other regulating procedures, it is best to do the final adjustment in the piano. Small refinements can be made with a thin screwdriver between the strings in most cases.

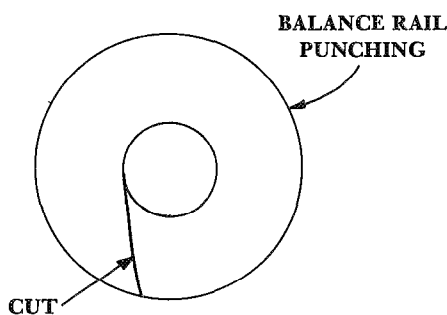
#### TECH TIPS

Our first tip comes from Guy McKay of Indianapolis, as reprinted from the "Indy 440":

*"Did you ever finish leveling a set of keys on a grand, put the action back on, get everything tightened down and then find that one or two keys are too high or too low? If it is a Steinway you will find it is difficult to slip a punching under the balance rail bearing without removing the key.*

*"There is a way to do this without dismantling the action again. If you take the whippen all the way out and raise the hammer you will find that the key will lift all the way off the center pin. Then you can level as usual. This is a little more trouble on the other pianos, as you may need to remove the hammer rest rail to get the whippen out."* —Guy McKay.

Of course, Guy is referring to the more recent Steinways with the "accelerated" or rounded balance key fulcrum. Another tip which will be useful to the lesser experienced



**Figure 7**

reader is that of removing the key-strip (or key upstop rail) and inserting a cut punching of the desired thickness as shown in **Figure 7** and grasp it with a pair of 8" tweezers, available from supply houses. Lift the key slightly above its normal at-rest position, nudge the cloth punching up, and insert the paper punching around the balance rail pin.

Our second tip comes from a student member of the Philadelphia Chapter:

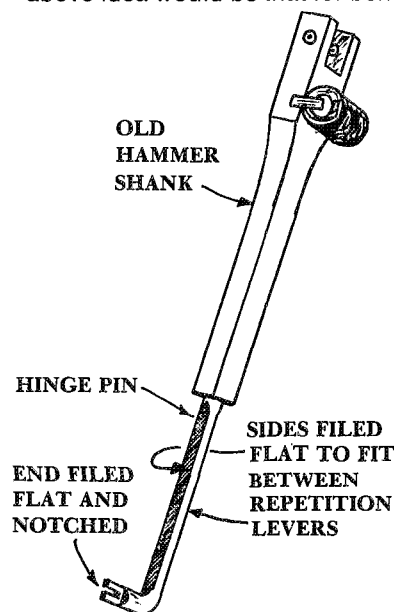
*"Yesterday, while beginning regulation on a Chickering Quarter Grand, I realized I didn't have one of those neat little tools for bending the repetition springs. So I made one.*

*"I simply took a hinge pin that was lying around, filed off the rounded end (short side), and very carefully cut a notch in it with a hacksaw. Needing a handle, I took an old grand hammer shank, cut it off just past where it turned square, drilled a hole and shoved the hinge pin in.*

*"Voila! It didn't work. It was too fat to fit between the repetition levers, so I put it in the vise and filed it flat where it fits between the levers (see **Figure 8**). Now it works rather nicely, and was cheap and fast to make. The knuckle of the shank makes a nice thumb rest.*

*"I hope you can use this in your column in the Journal (I love to see my name in print). If not, I'll try to come up with something better..."* —Art Jones, Medford, New Jersey.

That was fine, Art. Keep thinking, and your name will appear regularly. My only comment regarding the above idea would be that for bending



**Figure 8**



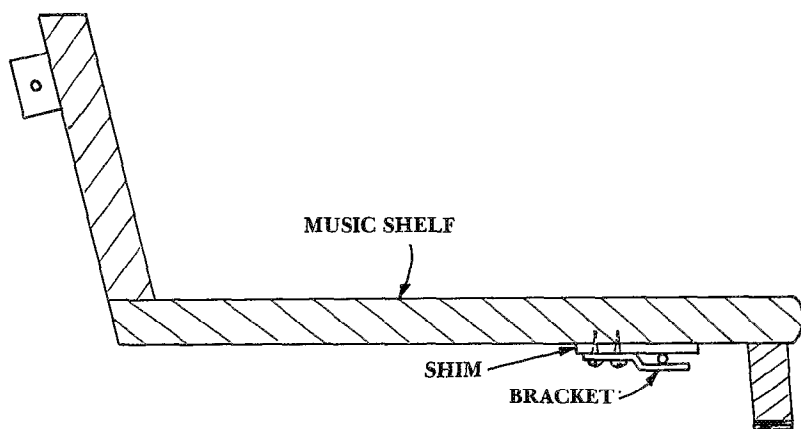


Figure 9

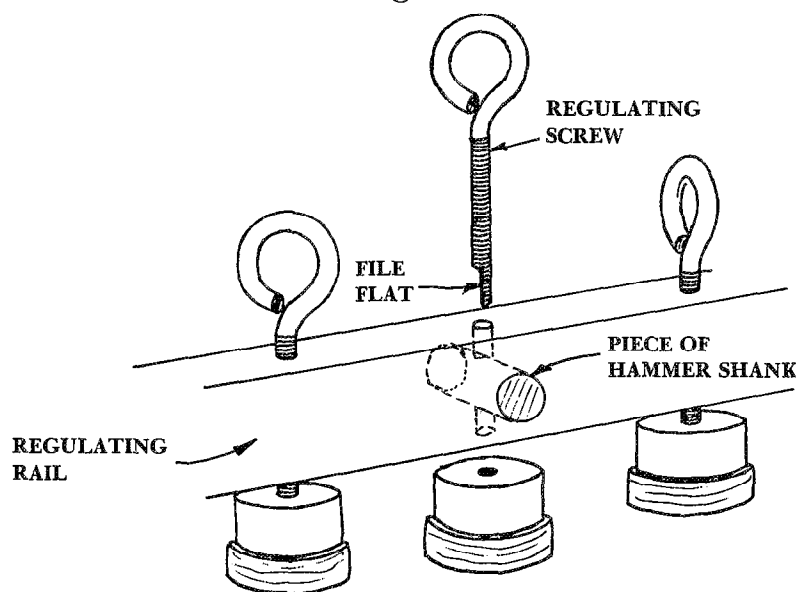


Figure 10

anything heavier than a repetition spring it would be better to use steel than brass; but the idea is good — as a matter of fact, the toolcases of the finest piano craftsmen seem to always contain some handmade tools. It would be interesting to know just how many of these are in daily service.

Our third tip is from Gerald Foye of Lemon Grove, California, and it involves a solution to a relatively common fly-fitting problem. Gerald has noted that on some pianos the key cover hits the music shelf, which keeps the front of the key cover from dropping or closing on one or both sides. His solution is as follows:

*"Solution: Add shims between metal bracket and shelf which raises shelf to clear key cover. Stack shims as required. For reference something like ice cream sticks work well. Drill holes corresponding to holes in bracket. Cardboard is also suitable. Make strips long enough to go to front*

*of shelf to avoid catching on pins when sliding in place (see Figure 9).*

*"Also, to avoid ripping or folding name board felt, key cover should be back (open) when mounting music shelf."*

Our final tip for this month was submitted by Liz Baker, who has come up with a very clever way to repair a stripped letoff rail, as shown in **Figure 10**. Here is the text of her letter:

*"I was tuning a piano fresh from the factory a few days ago and found problems with let off on one particular note. I'd regulate let off only to find the note blocking again after two or three blows. Upon inspection, I found the screw hole in the let off rail was stripped. Here's a good way to solve the problem without removing the let off rail from the action. It can even be done right in the piano.*

*"Remove the screw and drill a hole through the let off rail from front to back. Use a 7/32 bit. Put a little glue on a short length of hammer shank*

*and insert it into the hole.*

*"Put the screw in a vise, being careful not to damage the threads, and with a file remove about half of the tip from either the left or right side. The screw acts like a paddle bit. Just start it in its hole and it will drill its way right through the hammer shank. Dab a little glue on the let-off button before you put it on the screw."* —Liz Baker, St. Louis, Missouri.

## READER COMMENTS

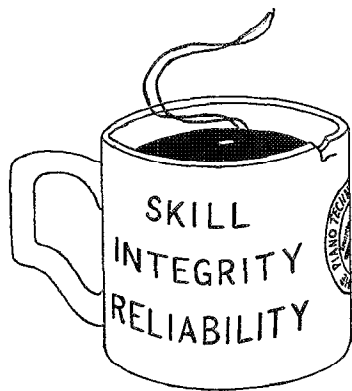
*"Dear Jack,*

*I have just read your part of the April Journal and your comments under "Bar Piano" makes me wonder if I have a corner on a lost art. About every two to three years I tune a piano with a honky-tonk tuning but it is a careful and not hap-hazard process. I also charge \$10.00 extra for such service and I am perfectly willing to have my name given as the tuner.*

*"The process is as follows: I tune the piano in the usual manner on the center strings and the left hand strings are tuned in unison with the centers. Then I go back to the first string after the break from the bass if it has tri-chords down to that point or to the first tri-chord string and set the right hand string about one beat sharp. With this as a base I then set another temperament on the right hand strings and then tune the right hand strings from there to the top. I do not make any variation from the bi-chord tones to the bottom. The temperament on the right hand strings does not have to have the same careful setting as the center strings received because the effect will be just as good anyway. I'm sure you can see how this will give the piano what some people call a shimmering tone but it is even in progression throughout 2/3 of the keyboard. I know the difference doubles each octave but try it before you condemn it.*

*"As to doing something for the hammers, give them a swipe with a filing stick with fine grit. This is done on the side of the head from the wood toward the center of the strike point. The effect is very slight but it does make a tiny step in the right direction without doing any permanent damage to the heads. I have never used any shellac for such and don't intend to. I have used thumb tacks a couple of times but never in the center of the strike point. I put them in below the strike point where just the edge of the tack heads contacts the string slightly. The last time I did this was at*

*(continued on page 16)*



# Shoptalk

## The Inner Technician

By Susan Graham

Let me introduce myself: I am Susan Graham, piano technician. For nine years I've been a fulltime, self-employed technician, in partnership with my husband Joe Saah. Because it has always been what most interests me, I specialize in rebuilding and shopwork, and in my column I hope to present some useful ideas, tools, and methods for others who do this kind of work. My premise is that quality work can be done on a small scale, and so I will be gearing much of what I say toward the "one-horse shop." In our collective effort through PTG to raise the level of our profession, expand our knowledge and improve our methods, we sometimes intimidate ourselves from doing something in which we are interested. We learn from the most skilled and experienced in the profession - which is as it should be - but it can lead to an unbalanced viewpoint. It's human nature not to want to broadcast mistakes, so we often don't hear about each other's and feel quite alone with our problems; sometimes it seems that without ultra-refined techniques and expensive equipment we are a discredit to the profession. Often technicians who have trained in large, well-equipped shops have difficulty starting on their own, feeling a need for a huge capital outlay just to begin: they have missed their mentor in the early days of mistakes and difficulties and compare themselves unfairly to his or her current level of expertise. Indeed, many technicians have forgotten what it was like to be starting out, faced with an overwhelming body of knowledge and a seemingly endless list of "necessary" equipment. While I do not advocate undertaking work for which one simply

doesn't have the training or even the basic equipment (and I adhere firmly to the rule of never experimenting on anyone's piano except my own), my point is that I have always found ways to do things on the small scale at which I am comfortable: these are the kinds of things I will be presenting.

Regardless of anything else, attitude and work habits are an important part of everyone's work and I would like to share in this first column some of the things which are helpful to me. I feel they have enabled me to do better work, and to enjoy and have confidence in what I do.

The first consideration is: what kind of work do you like to do? In the beginning you should train and learn about everything you can and when you start a business you will probably take what you can get. Pay attention, though, to what you find interesting and easy, and what is boring, frustrating or simply incomprehensible. Why are you a piano technician? Money? Independence? Interested in music, in working with your hands? Just fell into it? Keeping these reasons in mind as you progress as a technician can help you judge what kind of work you would like to do. What kind of person are you? Do you like to go out, meet customers and perform the immediate service work of tuning and minor repairs, or do you prefer to stay in the shop and work on major projects? You will do your best at things which interest you and in a style and setting which is comfortable to you. Emphasizing your strong points will also help you to accept aspects of the business which are unpleasant but necessary, and you will waste less energy resisting them and have a more positive approach.

Another thing which is helpful to consider is: under what kind of

schedule do you work best? Do you bounce out of the house in the morning or do you perform that first tuning frankly half-asleep? Can you only get work done under pressure of a deadline, or is that when you fall apart? Face it, by the time you're old enough to be reading this, these habits are set. When you are aware of them you use your time and talents more effectively. If you find yourself dreading going to work, day in and day out, you aren't going to do good work very long, and if you waste a lot of time and then need it later, you need to reorganize your schedule. At the very least, schedule your most demanding jobs during your best time, and watch out for the slump! (I never do anything important at four in the afternoon, having learned the hard way that is when I make the really dumb mistakes).

An important aspect of scheduling is time off. We all tend to get in a rut working 6 days a week, doing bookwork and making calls in the evening, but still never quite feeling caught up. If you're going to do good work, and keep doing it, you must give yourself time away from it. Sit down at the first of the year or each month and just cross out days: at least one complete weekend a month, one week every three months, and one month every three years should belong to you. Guard those days with your life! Can't afford it? Try it and see how much more you get done having real free time to look forward to, and then coming back with renewed energy and interest.

A major reason for doing work which you enjoy and find interesting and doing it on a schedule and in a setting which is natural to you is to be able to stay relaxed and at ease. Forcing yourself to do something is not only largely unnecessary, it is

actually counterproductive. Most of us were educated under a system which advocated "trying hard" as the way to learn or do something, equating effort with effectiveness and even virtue. Now as we gain a more sophisticated understanding of how learning takes place and how the brain works, we find that "trying easy" is a better and healthier way to go. How many times have you tried and tried to remember something, only to give up and then have it come to you when you weren't even thinking about it any more? That thought was there all the time, and once you relaxed and stopped trying hard to remember, it surfaced. It is also possible to train yourself to learn and do things more quickly and effectively by learning in a very relaxed state. Studies have been done (the ones with which I am most familiar are those of Dr. Charles Garfield) which demonstrate how extensively this can be used by athletes, artists and anyone who wishes to improve ability and productivity. The relaxation state referred to is that which is achieved through meditation, yoga or even prayer. It is characterized by slow, rhythmic breathing and a feeling of warmth and heaviness in the body; the body becomes extremely relaxed but the mind remains alert. Such relaxation can also be achieved through methods such as self-hypnosis or autogenic training. Autogenic training teaches one to relax by reproducing the physical feeling: by consciously slowing the breathing and sending the message to various parts of the body that they are warm and relaxed, one learns the feeling and then can achieve it more and more quickly and effectively. It's rather like learning to ride a bicycle - once you know how it feels, you can always do it. A simple form of self-hypnosis is having a cue - an external object or situation - which you associate with being relaxed. This is what a coffee break is about, or having a particular place where you think best, or having a lucky charm. It is something which reminds you to ease up, take a breath, and let your mind work without a lot of agitation and anxiety. Many of us have such things but may not realize how helpful they are - it is worthwhile to pay attention to what cues work for you and build them into your work habits. You also may wish to try another technique which I use extensively, which is pre-visualization: imagining in as much detail as possible what I am going to do before I do it. I

relax and then picture the tools, the bench, the supplies: everything related to the job. In this way I not only organize my thinking and begin in a positive manner, but it has been shown that if you deeply relax and then imagine a situation in great detail, the mind and body can respond and learn as if you were actually doing it. In this way, when you actually begin work, your reflexes are primed and there is little if any time wasted wondering what to do first, what next, etc. Develop the habit to sit and think about what you want to do even before you pick up a tool: your work will progress more smoothly and logically. This process is the opposite of worrying about something, imagining all the things which could go wrong. This is imagining how it is when things go right, giving yourself the message that they will go right and that you understand what you are doing and can deal with any problems which might arise. Much of this may sound familiar as "the power of positive thinking" but I think the key is approaching things in a more relaxed manner, allowing your mind to work far better than it does when you are worried and tense.

As we all know, pianos are capable of manifesting an infinite variety of problems: no one can possibly expect to have seen them all before. Therefore, much of what we do is deductive reasoning - you have to figure out what is wrong before you fix it. This is particularly likely to become a frustrating situation in a customer's home. As in all frustrating situations, I recommend stepping away from the thing a pace or two. Ask for a glass of water or announce you need something from the car and go out and rummage around in the trunk for a while. Put the problem completely out of your mind for a minute or two - you'll get some fresh air, break the tension, and you may even find something in the trunk which has been lost for weeks! Even a five minute break can bring you back to the piano with new energy, and you may find that some quiet part of your brain has the solution and, once you calm down, it has emerged. Often the combination of a break and a change in perspective can help stimulate you to see something you may be missing. We get "fixed" on thinking the problem is in a certain area and close our minds to other possibilities: again, the more aggravated, the more likely you are to do this. I had a problem once with faulty repetition in an

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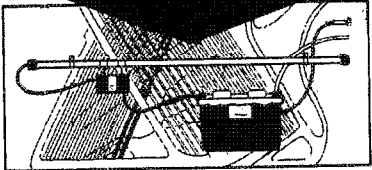
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old upright. I had recovered the keys and was called back because the notes weren't repeating. Well, let me tell you. I checked the keys for easing, checked all the centers for sluggishness (of course this meant pulling the action) and was at the point of fooling around trying to replace some hammer return springs when I decided to take my own advice and walk around the block. When I walked back in the room, it was clear as day that the piano was tipped backwards due to the uneven floor! Since upright pianos should be - well, upright - even tilted slightly forward, this was enough to cause occasional, subtle, and totally maddening faulty repetition. Obviously, I'll never make that mistake again, but how much time could I have saved if I'd stopped to think when I first started having trouble? You'll never stop running into unfamiliar problems, so everything you can do to become a better detective is worthwhile: relax, and let the "inner technician" have a chance.

Sometimes you'll run into a problem which you just can't solve. This is the time your PTG membership really means something. Call for help! There is no disgrace in not knowing something or in having trouble figuring a thing out. It happens to all of us, and asking for advice when you make a mistake or have trouble is the way to learn. Doctors and other professionals consult with each other as a matter of course, and this is precisely what you are doing. Of course, you need to keep in mind consideration for the technician(s) whose advice you seek. Avoid the habit of calling the same person with every little problem, and remember that asking for advice is not surrendering responsibility - it is still up to you to decide what to do, do it, and take responsibility if that still doesn't help. Get several opinions if you prefer (nobody has all the answers) but avoid confronting a technician who has just spent 10 minutes suggesting a solution with "so-and-so across town said to do just the opposite". It is up to you to determine which advice is the soundest. Be gracious and appreciative and above all considerate of another technician's time and you will find yourself able to tap into many kinds of experience. If it is a matter of borrowing tools or supplies or needing a second hand on the job, be sure to offer some kind of remuneration - pay for or replace what you borrow, pay for time or offer your services in return. You may wish

to experiment with partnership; either loosely constructed, based on friendship or necessity, or a real sharing of shop place and work, based on compatibility or work habits, goals and priorities. Having a good relationship with other technicians can help keep you from doing something you really don't want to do or really can't, for you can refer it to someone else with confidence and know the favor will be returned. Having help available may encourage you to try something which interests you. The point is to have honest exchange with other technicians to avoid the limited growth which results from isolation.

I couldn't begin to thank all the technicians who have helped me but I hope through this column to repay some of that - at least by helping others. I've come to the conclusion that the things I've talked about here are as important as hard technical data and know-how. If you know your good points and accept your limitations, you, your work and your customers will benefit. When you understand and appreciate what you do and why, develop good working habits and feel comfortable asking for help, you will not only be a well-respected and healthy technician, you will feel and present a confidence which is as valuable as any tool in the shop.

## New Northeast Chapter

The Philadelphia Chapter's family tree is growing again! The newest addition is called the "South Jersey Chapter." Assisting at this birth was Charlie Huether, our national secretary-treasurer. There were approximately 30 people attending the organizational meeting on June 23, 1981. The total membership of this new chapter is 21. The following are officers of the South Jersey Chapter: President — Walt Yakabosky; Vice-President — Fred Raudenbush; Treasurer — Vince Durante; and Secretary — David Forman.

This is a very enthusiastic group that is rarin' to go! Tentative plans have been made for meetings in July, and bench tests for the new members. Also, sometime in August at the Glassboro State College, in New Jersey, tuning tests will be administered and a test center established for

future dates. Things seem to be working in a coordinated manner for the chapter, with plenty to do for everyone. Many thanks to South Jersey Chapter member Frank Salicandro, for the use of his piano store for the organizational meeting. Charlie and I wish you the very best and are happy to have been a part of the organization of the South Jersey Chapter.

—Dick Bittinger, NERVP

## TECHNICAL FORUM

(continued from page 13)

*the request of a college who used the piano as a harpsichord, (on a 37" upright).*

*"I tuned a piano with a honky-tonk tuning for a lady one time who was very concerned about whether or not I knew how. I explained to her how I did it and it was a great surprise to her and she promptly told me that my predecessor certainly didn't go to the same extent to do a careful job. When I finished she sat down and played a chorus of Whispering or some other comparable light classic and after she struck the last chord she remarked, 'My God, I never heard anything so beautiful, not even in a pizza parlor.'"*

*"I can't take credit for the process herein outlined nor can I remember for sure where I got the formula but I have something in the back of my mind that I may have gotten it from Harry Hughes many years ago. It's yours for the same price he charged me." —Jim Hopperstad, Citrus Heights, California.*

## IN CONCLUSION

Our thanks to all of this month's contributors. We always need more technical material, so please send your articles, tips, comments or questions to me at this address:

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# After Touch

David W. Pitsch

We left off talking about the two factors that create the striking point for a hammer. Assuming that the hammer glue joint is 90° on the shank, which it must be, these two factors are: 1) The distance from the hammer shank center pin to the center of the hammer molding, and 2) The position of the hole in the hammer molding, more commonly called the hammer bore distance. In measuring factor number one, the measurement is always taken from the center of the center pin, to eliminate any error because of larger center pins.

Looking at the diagram, this distance for factor number one is labeled (L). In this particular instance, (L) = 5 1/4", which is a common measurement. (L) determines the type of arc that the hammer will take on its upward movement towards the string. The distance that the hammer travels in this arc is labeled (S). (S) is correctly termed the hammer travel distance. Note that this is different from (B) the hammer blow distance. These two words should not be used interchangeably.

As the hammer is moved in or out on the shank, this distance (S) changes. Minute alterations of (L) by the technician as he glues on a set of new hammers is acceptable in order to achieve the correct striking point. However, keep in mind that the piano was designed with a specific distance for (S). The work that the knuckle does in raising the hammer is in a ratio which is dependent upon (L) and the placement of the knuckle. The closer that these two placements are to what was designed, the better the action will perform.

Of greater importance than factor #1 is factor #2, the hammer bore distance. I regularly find good make grand pianos where the bore distance is wrong from the factory! When

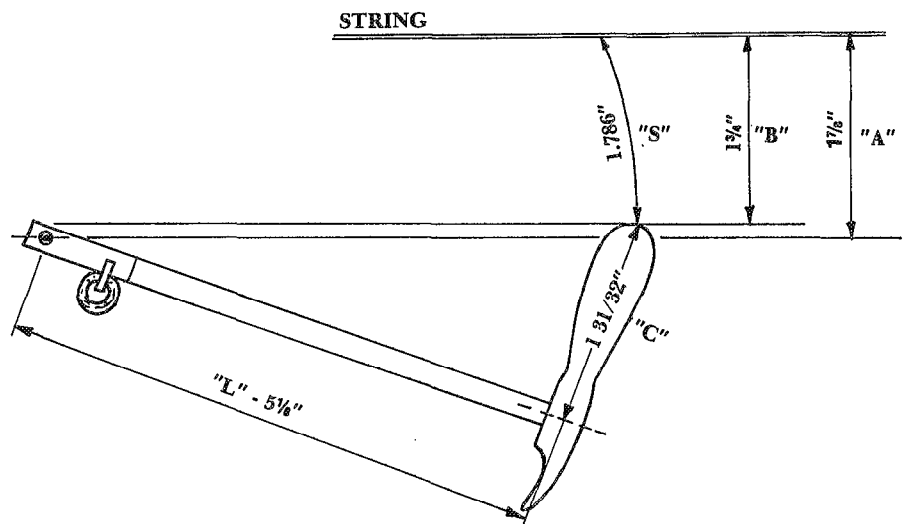
the manufacturer installs the hammers, he should measure the distance (A) on the diagram. This is the distance between the bottom of the string and the center of the center pin on the hammer shank. Unfortunately, many pianos are manufactured without regard to this measurement. (A) does fluctuate a little from what the piano was designed to be, mostly because of differences in the thicknesses of the plate castings. Sometimes the string height varies because of improperly installed agraffes, or in the case of a rebuilt piano, the string heights will vary because the plate was lowered in order to achieve proper downbearings.

When rebuilding, always wait until the new strings are installed before sending off for new hammers. Never buy stock hammers. Insist that the hammers be bored to match the piano. Either send to the hammer duplicator the measurements for (A) for each section of the action, or else bore your own. Anyone who has regulated many actions will have noticed that the string heights vary not only between similar pianos of the same make and model, but will also vary between the different sections of one instrument. Ever wonder why the

hammer rest rail never fits the bass hammer shanks like it does the tenor? One cause can be improper hammer boring. Why? Most grands are made with the hammers bored at a stock distance, to supposedly fit all of the pianos made of that model(s). No interest is paid to what (A) is, or whether (A) is the same for each given section of the action.

Why is this so important? There is more at stake than just the shanks being different heights off of the rest rail. Again looking at the diagram, there is a distance (C) which is the measurement taken from the center of the hole in the hammer molding to the top of the hammer. If the hole in the molding is properly placed, (C) should be greater than (A) for a new hammer.

In the event that (C) = (A), a new hammer will strike the string at exactly 90°, which is ideal. It produces the best wave shape in the string and will result in the best possible tone, all else being correct. However, we all know that a new hammer will compact as soon as it is played. As the hammer wears, (C) becomes smaller. If (C) becomes less than (A) the hammer overcenters. That is, the very tip of the hammer no longer strikes the





string, but rather the back (sound board) side of the hammer.

Before jumping to conclusions, (C) can be a little less than (A) and still not have the hammer overcentering. Another factor, that of the "whip" of the shank enters into the picture as well. Depending upon the size of the shank, the type of wood used, and the weight of the hammer, the shank actually bends a little as the note is played. This causes the hammer to be greater than 90° on the shank. The strike point changes and keeps the hammer from overcentering.

In order to allow for normal hammer wear, (C) should be drilled to be greater than (A). How much greater? It would depend upon two things. A soft hammer will wear faster than a harder one, and should be given more allowance. If you like to bore your own hammers, here are some guidelines.

For an action where (L) is 5 1/8", for each degree that the hammer leans back towards the bridge, the striking point is moved 1/32". If a one degree angle is desired, the bore should equal (A) plus 3/32". For two degrees, (C) = (A) + 11/64". Probably a one degree angle is sufficient to allow for wear on a good hard hammer.

What do all of these measurements have to do with setting the blow? Remember that the blow can be decreased to compensate for action wear. Earlier I stated that I would never alter the blow more than 1/8" to 3/16" from the factory specifications. Now I will reword that statement to read if you really want good tone *after regulation*, check the (A) and (C) distances *before regulation* to see if the hammers would be overcentering after reshaping them. Also watch for differences in (A) between the sections. Were the hammers bored to match? If not, for good concert level work in trying to obtain evenness of touch and tone, install a new set of hammers which are matched to the piano. Never wait until the underfelt shows through the grooves on the hammers before replacing them. To give the customer the most for their money, install a new set of hammers while the action is being regulated. This is far better than compromising while regulating and voicing, only to have to replace the hammers and reregulate the action later.



Did Widder Bradshaw's piano last week in Westborough. Wouldn't say it was a fancy neighborhood, but the fire department has an unlisted telephone number. She wanted the piano raised one half step, so I measured one of her steps and put 3 1/2 inch blocks under the piano. She called the next day, furious — guess I measured the wrong step.

Had a piano the other day where the overhang of the key was hitting the keyslip. No big deal. Just took the keyslip down to the lumber yard and made them mill it down 1/4 inch and the problem was solved.

One of my customers thought her keybed was warped. I told her the bed was all right, she just needed new mattresses.

Another lady said her fallboard wouldn't stay up. "Whatsamatta with you," I said, "doesn't fallboard say it's *supposed* to fall?" Some of these piano owners just don't understand anything about their pianos!

At a family reunion last week my cousin the auto mechanic asked me what I was doing. "Still tuning pianos," I said. "How interesting," he said. "What is the RPM on middle C?"

Attended the wedding yesterday of a couple who are both tooners; instead of rice, they threw bridal straps.

A customer told me her hammers were too hard. I don't understand . . . did you every try to drive a nail with a soft hammer?

Another customer told me she had a loose butt. I said, "Honey, I just came here to take care of your piano!"

Another client aksed me where the Capo D Astro Bar was. "I'm not sure; I think it's on Sunset Blvd. in L.A." I said.

And supply houses are really messed up. I ordered 26 14-lb bass and they sent me a bunch of piano hammers. So much for the fish fry!

A customer told me her repetition was not good. I said, "Would you repeat that?"

Another said her backchecks weren't right. I said, "Tell your osteopath, not me."

Then yesterday a customer said her lyre wasn't working. I told her to get him on unemployment.

That's all for this month, and don't bother to thank me . . . just send money.

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## Europiano Congress, April 1981

By Charles P. Huether

April 24, 1981 34 members and friends of the Piano Technicians Guild left to rendezvous in Frankfurt for a trip to Switzerland to attend the Europiano Congress, followed by a tour of Germany with side excursions into France and Holland. The travellers came from such diverse parts of the U.S. as California, Arizona, Minnesota, Michigan and New Jersey and it was late in the afternoon before all had arrived. In spite of jet lag the group assembled early the following morning and embarked by bus on an all-day drive south along the Rhine into Switzerland at Basel, then continuing south into the Bernese Alps to Gwatt on Lake Thun, arriving late in the afternoon. Our first glimpse of Switzerland was somewhat subdued because of the cloudy and rainy weather as we arrived at the Reformierte Heimstette, Gwatt, which would be our home for the week.

How beautiful our location was we had to wait a couple of days to find out. What we saw initially in the hazy, rainy weather were nearby farms and hill and the immediate shore across the lake. The beautiful green trees, flowers, fields and pastures were lovely to look at. But two days later when the mists rose and the weather cleared up a bit, we were greeted by the snow capped alps surrounding our location. It was breathtaking to see. Immediately before you are rolling hills and countryside, beautifully green, finely cultivated farms, pastures and colorful houses. Over these hills, hanging like a backdrop in a theatre are high mountains and peaks, all white with snow.

So much for the travelogue. The Europiano Congress was a unique experience. Meeting for seminars and classes were almost 300 piano technicians from Switzerland, Germany, Belgium, France, Italy, Norway, Finland, Great Britain, Japan and the United States. In such a polyglot group, one would think there would be difficulty in communicating. Indeed, there were some difficulties, but as the days passed, more and more lines of communication were opened. At our classes, conducted mostly in German, we had interpreters. Fred Odenheimer and Leon Levitch served for the English speaking group which included those from the U.S. plus the English and some from Norway. The groups broke up by language into four groups and each class was repeated four times, translated each time for the principle language of the group. While things were slowed down a bit, it also added a dimension of interest, emphasizing the problems of international communication and the many ways of overcoming them beyond language. We found piano to be a truly universal means of communication. The large group meetings, like the welcome and farewells and other general assemblies were translated four times.

There were two general seminars, The Components of Piano Sound and Voicing. These were given with audio visual projectors and in the case of Voicing, with closed circuit TV camera and three TV sets so that everyone could see the instructor working on the hammers. Each other class except Tuning was hands-on with working models where all could participate by doing. The instructors explained and demonstrated, then let

the students work at the models while they went from station to station to help and answer problems. The classes included: Grand Regulation, Grand Damper Installation, Bridge Repair, Upright Action Assembly and Regulation, Soundboard Repair and Tuning.

In addition to these classes were two wonderful afternoon outings. One was a trip to the nearby piano factory of Burger-Jacobi. An excellent guided tour was provided. Although housed in old buildings, the operation was anything but old fashioned. Included were some of the most modern machines for wood-working and finishing, stringing and action assembly. The tour finished up with some light refreshments, wine and soft drinks, cheese and cookies.

The second afternoon was the one day we had perfect weather. Blue skies, clear views and sunshine. And it was most appropriate for we were taken by bus to ride the cable tram to the top of the Schulthorn, nearly 10,000 feet high. It was an exciting and exhilarating trip, with three changes of car. Up and up, through the clouds to the summit where there was a beautiful restaurant and observation deck. In all directions stretched the snowcapped alpine peaks, most notably, Jungfrau, Eiger and Moench. A spectacular view, breathtaking and beautiful beyond description. Other travellers were seated in lounge chairs, shirts off, enjoying the sun and getting a tan amidst the piles of snow. We capped the exhilarating experience with a snowball fight, fun for all, participants as well as observers.

Our accommodations in Gwatt were simple dormitory rooms, comfortable and clean. Meals were taken

in another building where there were several large refectory rooms. The food was excellent and plentiful. Wine and beer were available at meals, as well as other non-alcoholic beverages. To me Gwatt will always be remembered for its wonderful croissants served each morning for breakfast. Eating together made for an extension of our international contacts and we were able to continue and enlarge our acquaintances made during the day at the other activities.

Two meetings were held concerning the recently formed International Association of Piano Builders and Technicians. One was to inform the Europiano groups in attendance about the organization and its goals and to offer them the opportunity of joining the group, whose membership at present consists of the Japanese Piano Technicians Association and the Piano Technicians Guild. The European groups were interested and asked many questions but declined to come to any decision, preferring to think about it a little longer. The second meeting was the scheduled meeting of IAPBT. This was a meeting of the member groups, JAPT and PTG, although there were people from Europiano observing. At this meeting the Bylaws of the organization as originally developed two years ago were refined and directors were elected, one from each organization. Nobu Tanaka was re-elected to represent the Japanese organization and LaRoy Edwards was elected to represent PTG.

The conclusion of the week's activities was an outdoor concert, at dusk, by three Alpinhorn players. Dressed in the folk costume of the Bernese Alps, with their home-made 12-foot-long wooden horns they played the beautiful melodies and harmonies as a farewell to all of us. Then, put into a fitting mood of friendship and farewell, we ended our visit with an evening of fellowship and fun in one of the large meeting rooms, while the fireplace roared with the burning scraps of bridges used in the repair classes during the week.

A profound vote of thanks is due to Osvaldo Sasso, President of Europiano; Erwin Lauchli, President of the Swiss Organization who made all the arrangements and organized the week's activities, and Fritz Grossenbacher who assisted him.

And then, Saturday morning it was all over. Our group from the U.S., reduced by eight who had their own

travel plans, departed on our own bus, with guide, for a further tour. It was a flying trip, full of interesting and fascinating sights and experiences. As someone said: "there were so many unforgettable experiences, it is hard to remember them all." They included: a visit to a Music Box Museum; seeing the paintings of 16th Century painter Matthias Gruenewald; Mainz Cathedral; a boat trip down the Rhine; Cologne and its Cathedral; Hamburg; Amsterdam; the Tulips of Holland at their peak of beauty and, in between these exciting sights, the piano factories of Ibach, Grottrian, Schimmel and Rippen and the iron foundry of Ahlman. The European factories were remarkable in the many ways they were mechanizing the manufacturing process. The owners, Messers Ibach, Grottrian, Schimmel and Rippen were overwhelmingly gracious and hospitable, making each visit and tour a memorable experience. We are all deeply in debt to these gracious gentlemen for giving us so much of their time and interest and sharing so much of their skill and knowledge.

The 1981 Europiano Congress and the PTG tour of France, Holland and West Germany which followed was an experience which we participants will long cherish. We brought back knowledge, friendship and an expanded understanding of the international interdependence of us all. We are grateful to Fred Odenheimer, Chairman of the International Relations Committee who was responsible for all the arrangements. Without Fred to do the hard work of preparation and development, we would never have made the trip. We are left with only one last question: "When do we go again?"

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# VACUUM LINE

Raye McCall

Before I get to the topic for discussion in this article, I have a problem with which I hope somebody can help me. A client of mine has a Welte-Mignon in a beautiful Jesse French grand case of which both the player unit and entire piano were restored in our shop about four or five years ago. The player is still performing very nicely but the OFF-ON switch has worn out. Every possible source for replacement has been investigated but as yet no replacement has been found. Can anyone tell me where a switch may be found?

## Pumps Revisited

It has not been very long since I wrote a two-part article on the subject of pumps. However some of the pumps that we technicians have to deal with are very intricate and the more we learn about them, the better equipped we are to solve the problems that most certainly come our way. I am referring to the rotary pump as found in most expression players and more specifically the Ampico pump which has the wood adjustor crank rods.

There recently appeared an excellent article on this subject in the AMICA (Automatic Musical Instruments Collectors' Association) bulletin. It was written by Craig Brougher. Craig is a piano and player technician but does not belong to the Guild. I am convinced after having talked with him that his experience would be valuable to this organization. Could I suggest that the Kansas City people take this under consideration?

Craig's treatise deals with rebuilding the aforementioned Ampico pump. I have secured his permission to use his information in this column.

When you completely rebuild one of these pumps, great care must be exercised in every detail so that when you have reassembled the pump and replaced it in the piano, you do not hear a dismal (and very upsetting) knocking sound as the pump runs. There are numerous gremlins which can cause a knocking pump. Therefore, do not knock it - FIX IT!

When you have disassembled the pump, one of the first observations you will make is the impressions in the wood under the crankpin bracket. Look carefully and you will probably see that there is variation as to depth of crush and angle. This would suggest the impressions were made by a fixture which was designed to align the bellows crankpin with the

crankrod pin.

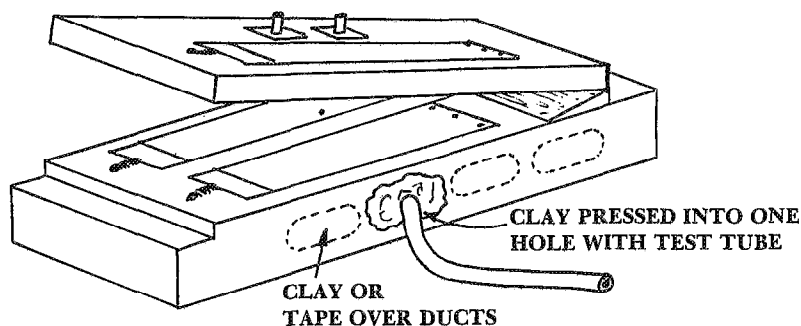
What do you suppose would happen to the thousands of rotary pumps passing through the factory if a set of wood and cloth bellows were attached to a precision set of crankpins by means of a felt bushed wood connecting rod and then pumped back and forth under tremendous tension? What would you say about the chances of the bellows crankpins all traveling in perfect alignment with the crankrod pins so that by merely slipping on the wooden connecting rod everything would run absolutely true for life? Since the connecting rod has bearings made from bushing cloth, it lacks the ability to square things up and will therefore be the victim of any possible misalignment. The connecting pin on the bellows is not quite perpendicular to the bellows arc vector line nor are the bellows true to their respective crankpins. Hence, a double error. So as the pump continues to run, the hole at each end of the wooden connecting rod which was originally round has now become gradually ovalled. There is a spring loaded adjustor wedge in each one of the four connecting rods and as the

eccentricity develops, these wedges are on the move at least twice for every revolution of the pump. Every time they move, there is a snap which, when amplified through the pump assembly and the frame of the piano, becomes a knock.

Another cause of pump knocking is inside-mounted flap valves. The inside flap valves on any rotary pump are very critical. These valves must be formed and installed so that when they close, they do so quietly, efficiently, and instantly. You can test for airtightness by taping over all but one of the channel holes. Into the open hole you put a suck tube and seal around it with ductseal clay. (Figure 1.) (This clay is available at most electrical supply houses.) If there is the slightest thump or leak when you suck on the tube, you should replace the valve(s) because if you do not, they will most certainly give you trouble.

Bad bearings can also be the cause of unwanted pump noise. After several years since the birth of the player, it is best to not even think about keeping the original bearings. The correct replacements were given

Figure 1



in the earlier article on pumps.

At that same time I also talked about the cloth to use and the necessity for gussets. You should never put a pump together without first installing gussets.

The leather out of which you make the new flap valves must be selected carefully but at best it will not be made with the same care and quality control standards of yesteryear. You can install it under tension but it will stretch until there is no tension left. It can be kept from stretching by gluing pneumatic cloth to the smooth side. However, do not glue the cloth to it until you have formed and pre-stretched it. **Figure 2** is a suggested

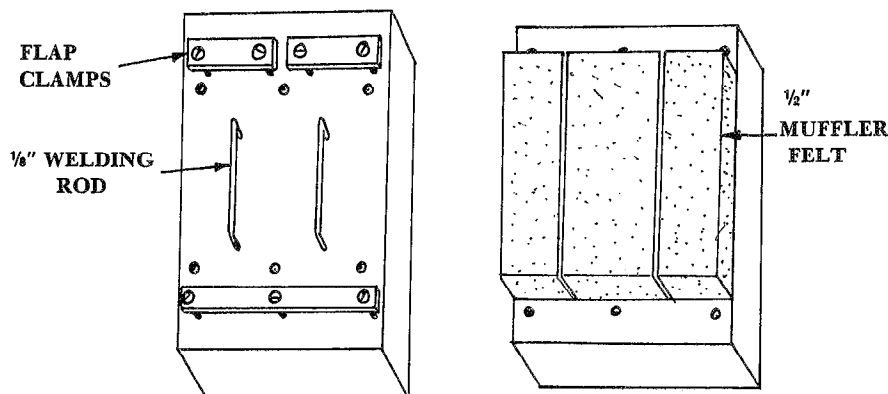
the originals but without slots. Drill holes in each end so they fit the pins snugly, using no felt. After you make these, drill out the holes in the bellows pin brackets at least .032 to give the bracket an opportunity to adjust if necessary. Also, it would be a good idea to use a countersink bit and put a chamfer at the bottom of the hole where the bracket contacts the bellows. Now coat the bottom of the bracket with a release agent, i.e., liquid beeswax, paraffin, paste wax, McLube 1708. Use Thermoset 100 to coat the footprint of each bracket on its bellows around each mounting stud. Install each dummy connecting rod onto its pin in the bracket and

screws in. Super glue is anaerobic (dries without air contact) and when it has dried, the screws are very tight.

I would like to suggest that you be tenacious in quality control. In other words do not slight any detail. If you end up with one quadrant weaker than the rest, this can cause the pump to thump and/or shimmy. Murphy's Law is ever present and if you have "short-changed" something, you have left the door open for problems later on. When something does go wrong, it is more often than not in the most inaccessible place.

This by no means completely covers the subject of rebuilding pumps. However, if you reread the previous two articles in this column on the subject of pumps, you should have a fairly good idea of what you are getting into. There are, no doubt, specifics on which you would like more information. All it takes is a letter from you with your questions or comments. Both are always welcome. □

**Figure 2**



form in which to make new flap valves. Forming leather is accomplished by wetting it, then working it into shape and letting it dry. During the drying it may be necessary to apply clamps in places in order to maintain the desired shape. If the pump had leather flap seats, the only reason for removing them would be to replace them. They were installed at the factory for the purpose of a tighter, quieter, and quicker seal. The longitudinal wire found under the flap valve was put there for quieting the valve's operation so that instead of a slap each time the flap valve came down, it would come down quietly and seal very tightly around the edges only. If you have carefully worked the new valves in the forming, it will seal as it should. There must be NO GAP AT ALL anywhere around the edge of the valve.

Earlier in this article I mentioned the bellows crankpin and its alignment to the crankrod pin. This must be precise, and here is how to achieve the necessary precision. Make four dummy connecting rods out of hard rock maple the same dimensions as

then onto the corresponding pin on the crankrod spider. Then bring each bellows up to the bracket being mounted and align over the studs. Hand tighten (NOT WRENCH) the nuts until you see a slight epoxy ooze. Now is the time to take your hands off and leave it alone until the epoxy has cured. It will cure in about eight (8) hours at normal room temperature (77° F.) or in just a few minutes on each of the bellows and you will have pin brackets that are precision fit.

Anytime you are doing major work on players such as described above and you encounter gaskets, they should ALWAYS be replaced. In most cases we use cork-neoprene. Pump gaskets as well as a lot of other gaskets are made of 1/16" gasket material. We prefer cork-neoprene gaskets because the material is man-made and therefore the thickness is uniform. Leather gaskets were used originally in many places but the thickness is not always consistent.

Craig has many good ideas and he has another one for replacing the manifold cover. Drip super glue into the hole(s) just before you run the

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# SOUND BACKGROUND

## Equal Temperament and Other Musical Scales of China

(continued from last issue)

By Jack Greenfield

### Early Scale Modification

During the first century B.C., Ching Fang wrote about the practice of ritual transposition describing the day-to-day change in different tones as the fundamental. To solve the problem of non-uniform intervals in twelve-tone scales developed by the previous traditional Chinese way, working with a stringed instrument he went beyond the 12th note and continued calculations to the 60th. He observed that the 54th note was almost identical with the first note, a fact which is the basis for the 53-note temperament considered in much later times. In the fifth century, Ch'ien Yueh-chih went as far the 360th note, dividing an octave into 360 intervals. Neither of the preceding were ever put into practice or had any influence on later developments.

The concept of temperament met conservative opposition in China as

was encountered when it was proposed in Europe. Around the beginning of the 5th century Ho Ch'eng T'ien constructed the first equal-tempered twelve-tone scale by lowering each of the notes of the pure fifth or fourth interval series by a simple factor so that the 13th note was the exact octave of the fundamental. His results were remarkable. Two notes were 9 cents low but most were accurate to 3 cents or less.

### Changes in Chinese Music During Middle Ages

During the Middle ages, Chinese music underwent changes resulting from outside influences. In earlier times, pitch was precise with music produced mainly by fixed pitch instruments such as chimes, bells, and gongs. There were only two types of stringed instruments. Later the adoption of musical styles and new stringed instruments from other Central Asiatic countries introduced gliding scales and shaded sustained notes.

The great cultural age of the Sung Dynasty (960 - 1279) has been called the Golden age in Chinese music. A system of modal scales similar to the modal practice of Europe had developed. Chinese theorists wrote about the possibility of 84 different modes derived from heptatonic scales on 12 pitches. The actual number in use was much less. Temple music and concert music was given very elaborate presentations by ensembles including large choirs and hundreds of musicians. One ensemble reported included 120 ch'ins, 120 shes, 200 mouth organs, 20 oboes, together with drums, bells, and chimes. Our modern ears would probably not appreciate such a sound.

Early in the 13th Century, China was attacked by the Mongols under Genghiz Khan and came under the rule of the Mongol Emperors of the Yuan dynasty (1283 - 1368). The Mongols introduced new musical instru-

ments and the diatonic major scale which was accepted as the main mode of Chinese music. The first complete music dramas or operas emerged during this era.

### Accurate Calculation of Equal-Tempered Scale

Chinese rulers regained control and established the Ming dynasty (1368 - 1644). In 1596, a great musical scholar of this era, Prince Chu Tsai-yu completed a remarkable work covering Chinese music history and theory, the nineteen volume *Handbook of Music*. Included was a proposal for a 12-tone equal-tempered scale derived by use of the interval ratio the 12th root of 2. He gave string lengths for twelve-tone equal temperament correct to nine places. Chu's calculations were not based on a theoretical understanding but were accomplished by numerological manipulation giving the same results. Chu was more accurate and introduced his study at the same time or a little ahead of a similar concept in Europe.

### Decline of Traditional Chinese Music

Chu's work had no influence on the course of Chinese music. Except for a new singing style which enriched music drama, the Ming dynasty was not a very creative period. Musical life now started on the decline that has continued into modern times. At the beginning of the eighteenth century, a scale dividing the octave into fourteen steps appeared. This caused difficulties because of differences in the intonation of flutes and chimes on the one hand and stringed instruments on the other. Music based on this scale cannot be played on an equal tempered instrument without considerable distortion.

As time went on, the quality of the performance of court and temple music continued to regress except for occasional attempts at revival by several emperors. Finally termination of the government support given

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music by the emperor when imperial rule ended in 1911 hastened the disappearance of the more sophisticated classical styles. Now, Western music has taken a position of prominence in Chinese society thereby increasing the neglect of China's own traditional music cul-

ture. Looking ahead optimistically, the recent revival of interest in historic music of the West may encourage a similar interest in the restoration of the unique old music of China. The following table gives calculated or theoretical intonation (cents) for twelve-tone scales and the

ancient and modern ch'in discussed. The final three sets of figures are measurements made by Ellis in 1885. The *yang ch'in* or dulcimer of China was introduced from Europe or Turkey. Gong chimes are sets of tuned bronze plaques.

	I	#	II	#	III	IV	#	V	#	VI	#	VII	VIII
Calculated Equal temperament Prince Chu Tsai-yu, 1596	0	100	200	300	400	500	600	700	800	900	1000	1100	1200
Calculated Ho Ch'eng Tien, Fifth Century	0	106	202	305	403	503	604	701	803	903	1004	1101	1200
Calculated Traditional Ling Lun, about 2800 B.C.	0	114	204	318	408	522	612	702	816	906	1020	1110	1200
Modern Ch'in Calculated	0		204			498		702	806	894			1200
Ancient bronze ch'in, calculated (from markings)	0		231	316	386	498		702		884			1200
Dulcimer Yang ch'in, 1885	0		169	274		491		674		878	996		1198
Gong-chimes,	0		169		367	497	586	661	775 797			1062	1208
Sheng (mouth organ) 1885	0		210	388		498		715		980	1040		1199

References will be listed at the end of series.

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## All New for 1980-1981

This year the booster club has a new format.

1. **POINTS** The point system for bringing in a new member has been changed to give members a simpler, fairer system. Three points will be credited for bringing in a registered technician, apprentice or allied tradesman and one point for sponsoring a member of any other classification. In this way, the point spread recognizes the fact that all who sponsor a new member are actively supporting the Guild.

Members who achieve fifteen points will be honored in the 1981 President's Club. Those who help bring a former member back into the Guild will be honored in the 1981 Restorer's Club.

2. **PRIZES** This year as a special feature every member who brings in three members will receive a flashlight pen and every member who brings in seven new members will receive a Journal binder as a gift.

To be sure all points are properly recorded, please check all new member applications carefully.

1. Please **PRINT** your name after your signature on the line "recommended by" when you wish to receive credit for bringing a new member into the Guild. Some signatures are difficult to read and we regret having to omit a name for this reason.

2. Please show your own chapter after your name. Some members sponsor a new member into a chapter other than their own.

3. If you wish credit for a **RESTORED MEMBER**, please write this fact on the application form. It is not always possible to trace a former member after a lapse of time.

4. If corrections should be needed in the records, please notify the home office promptly. The **Journal** goes to print some weeks ahead of mailing.

5. The first figure after each name represents the number of points earned. The second figure shows the number of new members brought into the Guild for the year 1980-81.

## Final Membership Report

### Presidents Club

	Pts	Mbrs
DRAINE, Robert	31	11
RUSSELL, Robert	21	13
SMIT, Robert	18	6
BITTINGER, Dick	17	7
GILLER, Evan	16	6
MARCIANO, William	15	5
WAGNER, Robert	15	5
FINGER, Chris	15	5

### Restorer's Club

BITTINGER, Dick
COLEMAN, Sr., Jim
DeTAR, Brian
DUNCAN, David
FANNING, William
GOLD, Jimmy
MENSCHING, Dale
PREUITT, Ernie
SPRINKLE, Jack
WALKUP, Ken
WEEKS, George
WILLIAMS, Kenneth

### Honorable Mention

	Pts	Mbrs
BAIRD, John	6	6
BECK, Jacqueline	6	6
LILLICO, John	13	5
PREUITT, Ernest	13	5
COLEMAN, Sr., Jim	9	5
BUYCE, Harold	7	5
DORLEY, William	5	5
WEST, Richard	5	5
CUNNINGHAM, Jess	12	4
SCHOPPERT, Robert	12	4
STEELE, Joe	10	4
FELTON, Hilbert	10	4
McGUIRE, Michael	10	4
DROST, Michael	8	4
BRADY, Stephen	6	6
HERBERT, Curtis	4	4
COX, Merrill	9	3
DESENS, Marilyn	9	3
HANSON, Frank	9	3
OSBORNE, James	9	3
PRIMACK, Theodore	9	3
WAGNER, Lloyd	9	3
ANDERSON, Albert	7	3
ACKMAN, W.H.	5	3
ANDERSON, Mark	3	3
CAUNTER, Gerry	3	3
CRABB, Larry	3	3

### Pts. Mbrs.

### Booster Club

ACKMAN, W. H.	5	3
AFFLECK, Don	1	1
ALLEN, Jon	1	1
ANDERSON, Albert	7	3
ANDERSON, Mark	3	3
ASHMORE, Yvonne	1	1
ATHERTON, Olan	1	1
BACH, Philip F.	1	1
BAIRD, John	6	6
BARRUS, Ralph	3	1
BAUM, Patrick	3	1
BECK, Jacqueline	6	6
BENNETT, Wallace	3	1
BERG, Harry	4	2
BITTINGER, Dick	17	7
BLANTON, Tom	2	2
BRADY, Stephen	6	4
BRATTON, Donald	1	1
BROOKSHIRE, Jerry	1	1
BROWN, Anson J.	1	1
BROWNFIELD, Gary	4	2
BURBACH, Charles	2	2
BURTON, Robert	1	1
BUYCE, Harold	7	5
CALLAHAN, James	1	1
CAUNTER, Gerry	3	3
CHESEBOROUGH, Connie	1	1
CLARK, Peter	1	1
CLEVENGER, Wayne	4	2
COLEMAN, Sr., Jim	9	5
COLLINS, James A.	3	1
CONOVER, Lester	3	1
COX, Merrill	9	3
CRABB, Larry	3	3
CRAW, Stephen	1	1
CUNNINGHAM, Jess	12	4
DANTE, Richard	3	1
DAVENPORT, Richard	1	1
DeARMOND, C.E.	6	2
DEFEBAGH, George	6	2
DELPIT, John	4	2
DESENS, Marilyn	9	3
DeTAR, Brian	4	2
DORLEY, William	5	5
DRAINE, Robert	31	11
DROST, Michael	8	4
DUNCAN, David	3	1
DUZE, Joseph	3	1
DYE, William J.	3	1
EATON, Wendell	6	2
EDWARDS, Laroy	3	1
EDWARDS, William E.	4	2
ERDMAN, James	1	1
ESMONDE-WHITE, Oliver	6	2
EVANS, Dan	4	2
FANNING, William	6	2
FELTON, Hilbert	10	4
FINGER, Chris	15	5
FLEGLE, Sr., Richard	1	1
FOSTER, Elmo	3	1
FREIDIN, Irving	1	1
FRITZ, Lloyd	3	1
FROST, Jack	6	2
GARLICK, William	3	1
GARMAN, Dale	3	1
GARRETT, Joseph	4	2
GEIGER, James	3	1

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GILLER, Evan	16 ... 6	PRIMACK, Theodore	9 ... 3
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GUY, John	4 ... 2	RITCHIE, Mark	3 ... 1
HAMILTON, Roger	2 ... 2	RODES, Jerrold	3 ... 1
HANSON, Frank	9 ... 3	ROE, Eugene	3 ... 1
HARMON, Clayton	3 ... 1	RUSSELL, Bob, Sr.	19 ... 13
HARVEY, Jim	3 ... 1	SAAH, Joseph	3 ... 1
HAUCK, Jack	1 ... 1	SCHMITT, Paul	6 ... 2
HAYDEN, David	3 ... 1	SCHOPPERT, Robert	12 ... 4
HEDRICK, Ralph	4 ... 2	SEITZ, Al	4 ... 2
HEINDELMAN, Lois	3 ... 1	SEYMOUR, Ed	1 ... 1
HENRY, Fern	1 ... 1	SIEROTA, Walter	4 ... 2
HERBERT, Curtis	4 ... 4	SKOLNIK, David	3 ... 1
HERSHBERGER, Ben	6 ... 2	SMIT, Robert	18 ... 6
HESS, Mark	3 ... 1	SNYDER, Willis	3 ... 1
HIGBY, James	3 ... 1	SPEIR, Leon	3 ... 1
HIPKINS, David	3 ... 1	STARES, J. H.	1 ... 1
HODGSON, Bryant	1 ... 1	STEELE, Joe	10 ... 4
HORNBERGER, Paul	3 ... 1	STONE, Patrick	6 ... 2
HUFFMAN, Keith M.	1 ... 1	STRONG, Douglas	3 ... 1
INGLES, Bob	1 ... 1	SVEC, John	1 ... 1
JACKSON, George	3 ... 1	THILE, Scott	1 ... 1
JACKSON, Steve	1 ... 1	UPHAM, Russ	3 ... 1
JOHNSON, Eric	3 ... 1	VARNADO, James P.	3 ... 1
JORDAN, Wayne	3 ... 1	WAGNER, Lloyd	9 ... 3
KELLEY, Allen	1 ... 1	WAGNER, Robert	15 ... 5
KIMBALL, Michael	1 ... 1	WALKUP, Ken	6 ... 2
KINGSBURY, Richard	3 ... 1	WEEKS, George	4 ... 2
KOKTON, Paul	3 ... 1	WELTON, Scott	3 ... 1
KREITZER, Mark	3 ... 1	WEST, Richard	5 ... 5
LAWRENCE, Paul A. U.	6 ... 2	WHITAKER, Harry	1 ... 1
LEVITCH, Leon	1 ... 1	WICKSELL, Larry	1 ... 1
LILLICO, John	13 ... 5	WILEY, John	1 ... 1
LOEFFLER, W. J.	3 ... 1	WILLIAMS, Kenneth	6 ... 2
LURIE, Mordecai	6 ... 2	WILLIS, Aubrey	1 ... 1
LYNN, Frederick	6 ... 2	WINSLOW, Allyn	3 ... 1
McCLURE, Wallace	1 ... 1	WISENBAKER, Martin	1 ... 1
McGUIRE, Michael	10 ... 4	WOLF, Bob	3 ... 1
McKAY, Jim	1 ... 1	WOODALL, Dennis	3 ... 1
McKINNON, Karl	1 ... 1	WUSKE, Paul	3 ... 1
MARCIANO, William	15 ... 5	ZEISEMER, Bruce	3 ... 1
MARTEN, Gil	3 ... 1	ZELLMAN, Adelaide	2 ... 2
MARTIN, Barbara	1 ... 1		
MATHESON, Duncan	1 ... 1		
MATTHEWS, John	3 ... 1		
MEEKINS, Joyce	3 ... 1		
MEHAFFEY, Francis	1 ... 1		
MENSCHING, Dale	6 ... 2		
MENSING, H. Daniel	3 ... 1		
MERANDO, Joseph A.	1 ... 1		
METZ, Al	2 ... 2		
MILLER, Donald	1 ... 1		
MONROE, Paul	1 ... 1		
MOORE, Robert J.	1 ... 1		
NEIE, Gary	3 ... 1		
NICOLAI, Jay	3 ... 1		
ODENHEIMER, Fred	7 ... 3		
OSBORNE, James	9 ... 3		
OSBORNE, Joseph	3 ... 1		
PENNINGTON, David L.	1 ... 1		
PERKINS, Robert	4 ... 2		
PERSON, Donald	1 ... 1		
PETERS, George	6 ... 2		
PETERSON, Gerald	3 ... 1		

## New Members

### REGISTERED TECHNICIANS

#### Boston Chapter

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32 Morgan Ave.  
Medford, MA 02155

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1072 East 61st Street  
Cleveland, OH 44103

Tim Smetts

227 Court  
Elyria, OH 44035

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1032 Vaughn #9  
Ann Arbor, MI 48104

Gene P. Wood

2711 W. Central #D-3  
Toledo, OH 43606

#### Eastern Washington Chapter

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North 4920 Driscoll Blvd.  
Spokane, WA 99208

#### Lansing Chapter

Grant S. Wolf  
619 Stoddard  
E. Lansing, MI 48823

#### New York Chapter

Paul F. Eccardt  
612 E. 16th St.  
Brooklyn, NY 11226

#### W. Maryland Chapter

David L. Hoffman  
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Winchester, VA 22601

#### Southern Tier Chapter

Robin J. Otto  
190 Chimney Hill Road  
Yalesville, CT 06492

### ALLIED TRADESMEN

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1518 N. Naomi St.  
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#### Reno Chapter

Peter E. Remneff  
P.O. Box 420  
Truckee, CA 95734

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102 Longview Drive  
Richmond, KY 40475

Mark A. Rains

PO Box 194  
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#### Connecticut Chapter

Charles P. Hubert  
466 Stanley St.  
New Britain, CT 06051

#### Denver Chapter

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7630 East 22nd Ave.  
Denver, CO 80207

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Alfred Asbury  
10 Clinton St.  
Brooklyn Hts., NY 11201

Frank G. Grady

80 A. Janes St., (5B)  
New York, NY 10014



Richard D. Grimalizzi  
627 46th Street  
Brooklyn, NY 11220

Frank C. Martinez  
2 Grace Court, Apt. 2V  
Brooklyn Heights, NY 11201

Alexander Ostrovsky  
4216 12th Avenue  
Brooklyn, NY 11219

Norman Rosenberg  
751 Argyle Rd.  
Brooklyn, NY 11230

Patrick A. Votta  
59 MonLague  
Brooklyn, NY 11201

John M. Woodruff  
238 Garfield  
Brooklyn, NY 11215

#### **ASSOCIATES**

##### **Los Angeles Chapter**

Carol L. Van Beek  
528 Meridian Terr.  
Los Angeles, CA 90042

##### **Syracuse Chapter**

Vincent E. Allen  
76 South 5th Ave.  
Ilion, NY 13357

#### **STUDENTS**

##### **Blue Grass Chapter**

Walter F. Powers  
717A Lorene Circle  
Mt. Sterling, KY 40353

##### **Central Florida Chapter**

Christian F. Voegele  
636 S. Huawasse Road  
Orlando, FL 32808

##### **Central Illinois Chapter**

Carol Begian  
1001 Harmon  
Urbana, IL 61801

##### **Central North Carolina**

John D. Chapman  
Rt. 3, Box 410A  
Lexington, NC 27292

##### **Indianapolis Chapter**

Gene C. Hamilton  
3638 Lombardi Place  
Indianapolis, IN 46226

Robert S. Bussell  
1124 W. Banta Road  
Indianapolis, IN 46217

##### **Los Angeles Chapter**

Richard D. Anderson  
20727 Vanowen A 21  
Canoga Park, CA 91306

##### **Orange County Chapter**

Sharon B. Davidor  
17421 Caspers Circle  
Huntington Beach, CA 92647

#### **Phoenix Chapter**

John J. Furcich  
3020 E. Main #A-90  
Mesa, AZ 85203

David E. McCain  
2756 N. Stapley  
Mesa, AZ 85203

##### **Vancouver B.C. Chapter**

Byron J. Leggat  
851 Blue Mt. St.  
Coquitlam, BC V3J 4S9

Evert Olthuis  
42299 Highland Drive  
Yarrow, BC V0X 2A0

#### **MEMBERS AT LARGE**

Paul L. Opskar  
3612 Jackson St.  
Sioux City, IA 51104

#### **Reclassifications**

##### **REGISTERED TECHNICIANS**

Essex, Nevin E.

Conrad, Steven R.

Gurda, Robert F.

Rawson, Philip T.

Sampson, John M.

Somer, Gene R.

Yepson, Howard A.

##### **ASSOCIATE**

**Kronberg, Carl L.**

# **Coming Events**

Notices of seminars will be accepted for insertion in THE JOURNAL no sooner than six months before an event. In addition to the listing below, your seminar may be publicized through one free display ad, two columns by two inches deep. It is the responsibility of the advertiser to submit copy for the ad to the Home Office. Material must be received six weeks prior to the publication date of THE JOURNAL.

**Note:** All seminar dates must be approved by the Conference Seminar Committee. Please submit the appropriate information on the Request for Seminar Approval Form which may be obtained from the Home Office.

##### **October 9-11, 1981**

OHIO STATE CONFERENCE  
Dayton, Ohio

**Contact:** Francis Hollingsworth  
2271 E. SV Paintersville Rd.  
Xenia, OH 45385

##### **October 11-13, 1981**

FLORIDA STATE CONVENTION  
Daytona Beach, Florida

**Contact:** Walter T. Pearson  
c/o Community Piano Service  
2366 So. Ridgewood Ave.  
South Daytona, FL 32019

##### **October 16-17, 1981**

NEW YORK STATE CONVENTION  
Howard Johnson's  
Plainview, New York

**Contact:** Richard Dante  
12 Magnolia Drive  
Kings Park, NY 11754  
(516) 724-8720

##### **October 16-18, 1981**

TEXAS STATE CONVENTION & SEMINAR  
Space Center Inn  
Houston, Texas

**Contact:** Martin Wisenbaker  
808 Cordell Street  
Houston, TX 77009  
(713) 864-6935

##### **November 7-8, 1981**

BALDWIN/STEINWAY SEMINAR  
Sponsored by Baltimore Chapter  
Towson State University  
Baltimore, Maryland

**Contact:** Morris Millman  
8326 Scotts Level Rd.  
Baltimore, MD 21208  
(301) 655-6527 or  
(703) 442-6165

##### **January 8-9, 1982**

ARIZONA STATE SEMINAR

**Contact:** John Allen  
Mesa, Arizona  
(602) 839-6078

#### **UPCOMING CONVENTIONS OF THE PIANO TECHNICIANS GUILD**

**1982** July 4-9  
Washington, D.C.  
Capitol Hilton

**1983** July 4-8  
New Orleans  
New Orleans Hilton & Towers

# THE AUXILIARY EXCHANGE

JULIE BERRY

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### Editor, Auxiliary Exchange

**JULIE BERRY**  
6520 Parker Lane  
Indianapolis, IN 46220

## Norman Rockwell Prints Available

A limited number of Norman Rockwell's print called "The Piano Tuner" are still available from the Auxiliary. The print is an 8" x 10" reproduction of a *Saturday Evening Post* cover from 1947. It costs \$3.50 (price includes postage) and may be ordered by writing Shirley Truax, R.D. #8, Box 40-E, Heather Drive, York, PA 17403. Please make checks payable to the Piano Technicians Guild Auxiliary.

★★★★★

Greetings from your new President. I am honored that you elected me to this office. Having been on the Board for the last two years, I know what it will take to be a good president. I think you have elected an entire Board that is committed to an active Auxiliary. The Board has already held its first meeting, and I am happy to report it looks like it will be a very productive year for our organization.

This Auxiliary is not an easy group to define. Our members are as diverse as they could possibly be, ranging in age from old to young, in interests from raising roses to watching whales, in occupations from working in piano shops to working as far away from piano shops as possible, in backgrounds from people who have never been east of the Mississippi to people who have never been west of the Mississippi. In fact, it sometimes amazes us that we ever had the nerve to plunge into the midst of this unique collection of people in the first place. And yet we all seem to discover how much we have to share and how much we enrich each others lives through the friendships we develop. No matter how many other friends I may collect through the years, they will not be able to take the place of the people I have met and come to know through the Piano Technicians Guild Auxiliary.

It's going to be a good year. We will soon begin plans for a super convention in Washington, D.C. next summer to mark the 25th anniversary of both the Guild and its Auxiliary. Between now and then your Board will be communicating with you through this column, through individual correspondence, and at seminars and local meetings. Please get in touch with us whenever you have an idea you'd like to share.

—Julie Berry

The last gavel has sounded, the exhibits have been dismantled, and only a few outdated messages hanging on a PTG bulletin board are left to indicate where our convention took place. Nevertheless, the suitcases we packed for the journey home gave clues about our stay in "Everybody's Favorite City;" perhaps it was a chocolate bar from Ghirardelli Square, a linen hankie with a hand-embroidered cable car, or matches from Henri's at the top of the hotel. And each time we happen across one of these small mementoes, we will remember with a smile the great time we had at the 1981 convention.

As we first approached San Francisco on the Airporter bus, I was skeptical of the nickname "Everybody's Favorite City." I noticed that this city also had slum districts and traffic jams. It was the attitude of the people which first began to win me over. The bus driver patiently answered our questions, the porter asked about our convention, the hotel staff gave service with a smile. By the end of the week, I was wondering why it had taken so long to discover everybody's favorite city.

The Auxiliary provided a full complement of activities so that non-technicians could attend the convention and have a chance to make friends and have fun being around piano people. Sunday there was a worship service. On Monday Dorothea Odenheimer shared her slides from the recent Europiano conference in Switzerland. Tuesday was a busy day. After the opening Assembly we were treated to a slide presentation and commentary to introduce San Francisco. That same day we had the Auxiliary Council and an afternoon reception 45 floors above the city. Wednesday was our day for classes: business building ideas from Phil Ba-

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Send check or money order (U.S. funds), made payable to the Piano Technicians Guild, to Classified Ads, THE JOURNAL, 113 Dexter Avenue North, Seattle, WA 98109.

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shaw, a light-hearted skit about parliamentary procedure from the Los Angeles Auxiliary, and body building with Dee Fairchild. This was also the day for our installation luncheon. Thursday morning 74 people boarded the buses for an all-day tour to the Sonoma wine country.

In addition to our Auxiliary activities we enjoyed attending the convention banquet (superb entertainment), the closing luncheon (lots of drawings for prize money), and receptions hosted by Yamaha and Steinway. It was a great opportunity for us to share some special times with our favorite technicians and their families. Our thanks to the many people whose work made this fine convention possible.

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**INSTALL YOUR OWN**, new, ready made **SOUNDBOARDS.** Key boards made. **The Piano Shoppe, Inc. (Benvenuto), 6825 Germantown Ave., Philadelphia, PA 19119. (215) 438-7038.**

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**CUSTOMER'S QUESTIONS?** The Piano Owner's Guild will answer them between tunings! Inquiries welcome. Hardbound, \$6.95; Softbound, \$3.95. Trade discounts, terms. **APEX PIANO PUBLISHERS, 2621 South 8th St., Sheboygan, WI 53081.**

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(continued from previous page)

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— Krefting, Jack	Replacing Upright Shanks	PTJ 11/70
— Johnson, James L.	Separating Glue Joints	PTJ 06/77
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# Piano Technicians Guild

## SEPTEMBER

## 1981 UPDATE

### SPECIAL EDITION - FULL REPORT ON ALL COUNCIL AND BOARD ACTION

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Tuning Examiners officially approved by the Board of Directors:*

NAME	LOCATION	CHAPTER	REGION
ALEXANDER, Wade	Freeville, NY	S. Tier, NY	NE
CARR, Robert	Deland, FL	Central Florida	SE
CATE, Allen	Los Angeles, CA	Los Angeles, CA	W
CHESEBROUGH, Connie	Cincinnati, OH	Cincinnati, OH	CE
CUNNINGHAM, Jess	New Orleans	New Orleans, LA	CE
DESENS, Marlyn	St. Louis Park, MN	Twin Cities, MN	CW
DUCKWORTH, Norman	Duncan, B.C.	Vancouver Island, B.C.	W
EVANS, George	Worcester, MA	Boston, MA	NE
FOSS, Mark	Kirkland, IL	Chicago, IL	CE
GEIGER, James	Houston, TX	Houston, TX	SC
GURNEE, Dan	Eureka, CA	Redwood, CA	W
HALLERAN, T.C.	Nelson, B.C.	Vancouver, B.C.	W
HANSON, Frank	Berwick, ME	New Hampshire, NH	NE
HOWELL, W. Dean	El Paso, TX	El Paso, TX	SC
KELLER, William	East Lancaster, PA	Reading-Lancaster, PA	NE
KEYES, Otto	Westmont, IL	Chicago, IL	CE
KINSER, William	Altoona, PA	Central PA	NE
LORD, Frank	Waukegan, IL	Chicago, IL	CE
LUNDAK, Franklin	Traer, IA	Central IA	CW
MANSCHRECK, Lee	Chicago, IL	Chicago, IL	CE
MC CALL, Raye	Pomona, CA	Pomona Valley, CA	W
PARSONS, Doug	Fort Worth, TX	Fort Worth, TX	CE
PHILLIPS, John	Seminole, FL	SW Florida	SE
REITER, Michael	Spanaway, WA	Puget Sound, WA	W
SCHELL, Stephen	Artesia, CA	South Bay, CA	W
SCHULTZ, Gary	Merrick, NY	L.I.-Nassau, NY	NE
SELLER, Marion	St. Paul, MN	Twin Cities, MN	CW
SERVISS, Kenneth	Vancouver, WA	Portland, OR	W
STEELE, Joseph	Fredericton, NB	Maritime Provinces	NE
STONE, Sidney	Hayward, CA	San Francisco, CA	W
TASSONI, Bruno	Los Angeles, CA	Los Angeles, CA	W
TERRELL, Elizabeth	Alexandria, LA	N.C. Louisiana	SC
WALSHE, Robert	El Paso, TX	El Paso, TX	SC
WICKSELL, Larry	Ft. Lauderdale, FL	South Florida	SE
WINN, Lloyd	Murray, UT	Salt Lake City, UT	W
ZEHME, Uwe	Ft. Lauderdale, FL	South Florida	SE

# Resume of the Action by Delegates in Council Session

This is a condensed report of the important action taken by the delegates at the Council Session held in San Francisco, California, July 5, 1981. The assembly considered all of the proposals for amendments to the Guild Bylaws and Regulations and completed all business in one day.

NEW CHAPTERS Seven new chapters were formally granted charters into the Piano Technicians Guild and all those who worked so hard to assist in the formation of the new chapters were congratulated.

COLORADO WEST .....	# 815	.....	Central West Region
MIDLAND, MICHIGAN.....	# 486	.....	Central East Region
NORTHERN MICHIGAN.....	# 496	.....	Central East Region
MARITIME PROVINCES.....	# 050	.....	Northeast Region
OTTAWA, ONTARIO, CANADA..	# 061	.....	Northeast Region
SOUTH JERSEY, NJ.....	# 080	.....	Northeast Region
SOUTHEAST MASSACHUSETTS..	# 024	.....	Northeast Region

CHAPTER SUSTAINING MEMBERSHIPS were granted to the following:

A.W. DICKEY .....	Phoenix, Arizona Chapter
WALTER J. DAMON .....	Milwaukee, Wisconsin Chapter
C.J. BUCK BUCHANAN.....	Eugene, Oregon Chapter
WALTER BROOKS, Sr.....	Connecticut Chapter

MINUTES The minutes of the 1980 Council Session were approved as printed.

REPORTS OF THE OFFICERS, THE EXECUTIVE DIRECTOR, THE STANDING COMMITTEES AND THE SPECIAL COMMITTEES were all received as printed.

SPECIAL COMMITTEES RENEWAL The following special committees were renewed by vote of the council:

Chapter Program Development, Scholarship and Teacher Relations.

Special Committees on Student Membership and Women Technicians were deleted from the committee list.

AMENDMENTS TO THE PTG BYLAWS AND REGULATIONS Action by the delegates in Council session was taken on all of the proposed amendments as follows:

81-1 DUES INCREASE The proposed increase of \$24.00 was considered and then amended to \$18.00. After much debate the delegates approved an increase of \$18.00 for all Registered Technicians, Apprentices and Allied Tradesmen and an increase of \$9.00 for Associate and Affiliate members. Student dues were not changed and remain at \$60.00 a year. The increase in dues to be effective with the 1982 dues payment.

BUDGET The budget was reviewed and adopted.

81-2 DUES RAISE BY BOARD ACTION After discussion this proposal was referred back to the Bylaws Committee.

81-3 DUES TO BE MADE IN ONE PAYMENT To reduce the cost of dues collection and the need for frequent delinquency notices and multiple billings the delegates approved a requirement that all dues payments in the future are to be made in a single payment. This means that members should plan now to send the annual dues payment in one sum since there will no longer be provision for partial payments.

Dues will be billed, as usual, in December and due January first. Dues will be delinquent if not paid by March 31 and anyone whose dues are not paid by that date will receive a notice of delinquency. If there is no response to the notice the member will be dropped 30 days later.

This new system provides a full three months for payment of the annual dues and four months before being dropped for nonpayment of dues. As usual the chapters and the RVP will be notified of all whose dues are delinquent or who have been dropped. Anyone whose name must be dropped from the rolls will no longer be on record at the Home Office for inclusion in the chapter member strength for council vote, since the drop will occur before the Council session begins.

81-4 CLARIFICATION OF AUDIT PROCEDURES The Home Office was directed to make all necessary records available for audit or other accounting examination or survey as directed by the Executive Board.

In addition, the Executive Board will designate an independent accountant each year to oversee the organization's books and accounting system. Authorize an annual accounting Review and Report by an independent accountant. Authorize an Audit and Report whenever deemed necessary or requested by Council.

81-5 DISSOLUTION PROCEDURE TO COMPLY WITH IRS REQUIREMENTS The following was adopted by the Council delegates and should be added to each chapter's own bylaws:

"In the event of dissolution of a chapter by vote or other action of the chapter membership, the net assets shall be applied as follows:

1. All liabilities and obligations shall be paid or satisfied or adequate provision shall be made therefor.
2. Any assets belonging to members or others shall be returned or conveyed, if the assets are held under such requirement.
3. Any assets not obligated under the above shall be conveyed to the Piano Technicians Guild Steve Jellen Memorial Library in the name of the chapter."

81-6 CLEVELAND CHAPTER PROPOSAL TO FACILITATE PROCESSING APPRENTICE MEMBERSHIP APPLICANTS. Amend Article IV Standard Tuning Test Qualifications for Membership Section J Requirements, par (3), Delete and substitute:

"An applicant who passes the bench and written tests by 50% or more in each category has the following options:

- a) Take an aural tuning test at chapter level to be administered by at least two Registered Technicians. If he/she passes the tuning test at 50% or more, he/she can be accepted as Apprentice without further testing.
- b) Those applicants who pass the bench and written tests at 80% or better can proceed to arrange to take the official tuning test and if they pass at 80% or better they can be classified as Registered Technicians.
- c) Those applicants who qualified as Apprentice under par. (a) above, also have the option to take the official tuning test if they so desire.

This proposal will officially define a 'tuning evaluation' and serve to more effectively screen applicants and advise them when they are ready to try the new tuning test. It will also permit an applicant to join as an Apprentice, if so qualified, without taking the new tuning test.

#### 81-7 NO AMENDMENT PROPOSED

81-8 CLARIFICATION OF STUDENT MEMBERSHIP Article III, Section 2 Student was amended by changing the first sentence to read as follows:

"Students shall be persons studying piano tuning and technology in a manner acceptable to the chapter, who are not yet advanced enough to attempt the qualifying examinations for membership." The remainder of the paragraph remains the same.

81-9 ALLIED TRADESMEN AS MEMBERS-AT-LARGE This proposal was defeated.

81-10 TRANSFER OF MEMBERSHIP A proposal to change the procedure currently stated in the Bylaws for transfer of members was defeated. The current procedure remains the same.

81-11 MEMBERSHIP FOR OLDER, INACTIVE MEMBERS A proposal to provide for small or no dues payment requirements for older, inactive members of ten years good standing in the Guild was referred back to the Bylaws Committee.

81-12 TO CLARIFY ASSOCIATE MEMBERSHIP Associate members are required to be members of a chapter and may not be members-at-large.

81-13 CHAPTER OFFICERS, TERM OF OFFICE AND TIME OF ELECTION A proposal to require chapter officer elections to take place in November or December of each year was defeated.

81-14 DEADLINES FOR PROPOSED AMENDMENTS Article XVIII Section 1(c) was amended to provide that a notice shall be published in the Journal Update at least 200 days prior to the opening of the Council session alerting chapters and members of the deadline date for submitting amendments to the Bylaws and Regulations Committee.

81-15 SIMPLIFICATION OF CHAPTER BUSINESS FUNCTIONS Article VIII Section 8 (b) place a period after the word 'depository' was adopted.

This amendment will permit chapters to use their own judgment in how they want to have their chapter checks signed. The current Bylaws required two signatories and now chapters may have one, two or as many as they choose.



81-16 ROTATION OF MEMBERS OF EXAMINATIONS AND TEST STANDARDS COMMITTEE The proposal as printed in the Council agenda Book was considered and after amendment was adopted in the following form:

" Starting in 1981 no member may serve more than three years consecutively. The committee shall include one Certified Tuning Examiner from each region and other advisors and administrators as needed. Each year, at least two of the regional Certified Tuning Examiners shall be replaced by newly appointed Certified Tuning Examiners so that there will be a staggered term."

81-17 NOMINATING PROCEDURES FOR REGIONAL VICE PRESIDENT Article XI, Section 5 (b) was amended by deleting the words "in council session". This means that regional vice presidents are not nominated in council session as was permitted in the Bylaws before the amendment was adopted.

81-18 COMMITTEE DELETION The standing committee on Piano Schools was deleted from the Bylaws.

81-19 COMMITTEE DELETION The standing committee on Government Affairs was deleted from the Bylaws.

81-20 USE OF PRONOUNS Article VII was amended by the addition of a new paragraph as follows:

" In all publications to use in lieu of the pronoun he, his, him; to use the pronoun combinations: he/she, his/hers, him/her, or a suitable neuter pronoun wherever applicable."

81-21 AUXILIARY EXCHANGE A proposal that the Auxiliary Exchange be published in the Update rather than the Journal was defeated.

ADDED TO COUNCIL AGENDA BY THE COUNCIL DELEGATES IN SESSION Regulations, Article III, Section G (3) was rescinded so that the Guild will no longer be a member of the National Music Council.

ELECTION OF OFFICERS The following Guild officers were elected:

President..... Sidney O. Stone  
Vice President..... Ernest Preuitt  
Treasurer-Secretary..... Charles Huether

REGIONAL VICE PRESIDENTS The following were elected in regional caucuses and formally ratified by the Council delegates:

Northeast Regional Vice President ..... Robert Smit  
Southeast Regional Vice President ..... Marshall Hawkins  
South Central Regional Vice President ..... Tom Blanton  
Central East Regional Vice President..... George Peters  
Central West Regional Vice President..... Richard Flegle  
Western Regional Vice President..... Dan Evans

STANDING OVATIONS were given to retiring president, BOB RUSSELL, and retiring Regional Vice Presidents WALTER KERBER and DICK BITTINGER.

ELECTED COMMITTEES The following were elected to committees in the Council session:

EDITORIAL ADVISORY COMMITTEE Judith Palmer, Walter Kerber, Steve Brady.

MINORITIES COMMITTEE Newton Hunt, Ernie Juhn, Pat Sankey.

NOMINATING COMMITTEE Ernie Juhn, Ruth Ann Jordan, Ron Berry, Chris Finger, Larry Crabb. Alternates: George Morgan and Ed Witting.

## **Boardroom Reports To the Membership**

The Executive Board of the Piano Technicians Guild was in session both before and after the Council session. The following action was taken by the Board:

IMMEDIATE PRIORITIES The board approved development of a set of immediate priorities to make best use of available funds and resources.

1. A review of each region with emphasis on:
  - a) Membership condition
    - 1) Enthusiasm and activity
    - 2) Growth
  - b) Level of Tuning Test implementation with emphasis on:
    - 1) Remote regions and areas
    - 2) Availability of equipment
2. Develop a list of priority needs by regions.
3. Make a consolidated list, organization-wide.
4. Select the top overall organization priorities and concentrate on solving them or setting up programs for solution.
5. Review priorities, assess progress and set new priorities as needed, as a regular process at each board meeting.

GUILD OFFICERS' DUTIES were reviewed and revised.

RVP's to send one letter during the year to all regional members and several times throughout the year to their chapters.

USE OF LOGO Special committee appointed to make recommendations on proper and recommended use of the logo in publications, business, etc. C. Huether, Bob Russell and Bob Smit.

INTERVIEWS Public Relations and Business Promotion Committee to make recommendations on procedure in handling interviews by press and other media.

PTG LOGO PIN A new design for the pin with the word REGISTERED TECHNICIAN on a banner beneath the logo was approved. The new pin is for sale now at \$4.00 each and the old design on tie tacks and tie bars only is still available at \$3.00 each.

COUNCIL DELEGATES The understood requirement that a council delegate must be a franchised member was referred to the Bylaws Committee for clarification.

CAUCUS PACKETS Chapter name and voting strength to be eliminated from the caucus ballots.

CHAPTER MANAGEMENT HANDBOOKS Reviewed for updating.

MONTANA CHAPTER TRANSFER REQUEST to Western Region referred to the Bylaws Committee.

CHAPTERS WITH FEWER THAN FIVE MEMBERS Consideration postponed to the midyear board session.

COUNCIL DELEGATE FORMS TO CHAPTERS To be mailed twice: two months and one month before the deadline for printing in the Council Agenda Book.

IAPBT REPORT It was reported that LaRoy Edwards was elected a director of the International Association of Piano Builders and Technicians representing PTG. The board confirmed and ratified the action. The 1983 international IAPBT session is to be held in Kyoto, Japan and authorization was given to Dan Evans to prepare tentative plans for an official PTG tour in connection with the IAPBT meeting.

RECOMMENDATION FOR A ROTATING COMMITTEE FOR INSTITUTE DIRECTORS was approved in substance with procedures to be reviewed for approval at the midyear board session.

LONGTERM MEMBERSHIP RECOGNITION Special committee appointed to make recommendations and report at the midyear board meeting.

AUDIT Jack Seidel & Company retained as auditors for the Guild through the opening of the midyear board session.

1981 CONVENTION Jim Bryant commended for outstanding contribution as the 1981 host committee chairman. Sincere and grateful thanks were given to Messrs. Steinway & Sons for the hosted reception before the banquet; to the Baldwin Piano & Organ Company for the notebook organizers; to the Niles Bryant School of Piano Tuning for the books A TUNER'S GUIDE TO SAN FRANCISCO.

1982 CONVENTION Ruth Ann Jordan confirmed as host committee chairman for the 1982 convention. A detailed review of plans for the Washington, D.C. convention was presented to the board. Special 25th anniversary flyers distributed at the San Francisco convention and to be distributed further. A detailed map of Washington, D.C. will be printed for all registrants and special arrangements made for a viewing of the fireworks display for the Fourth of July celebration.

JOURNAL TAPES FOR BLIND TUNERS To be publicised in the Update.

JOURNAL SERIES ON GUILD OFFICERS AND COMMITTEES to be started this year.

JOURNAL SERIES ON CHAPTER MANAGEMENT will be started in 1981.

JOURNAL ARTICLES TO INCLUDE CHAPTER AFFILIATION OF AUTHOR effective immediately.

REPRINTING GUILD BYLAWS & REGULATIONS To be sent to each chapter president and individual copies available upon request while supplies last. A stamped, self addressed envelope ( 9 x 7 inches ) to be sent with request.

PUBLICATIONS Two new pamphlets were approved for publication and will be ready shortly: WHAT IS THE PIANO TECHNICIANS GUILD? giving information on PTG and membership procedures; and THE PIANO TUNER-TECHNICIAN, a pamphlet designed to answer the questions of those interested in this highly skilled technical profession.

INSURANCE Eloise Ross, insurance broker presented a report to the board and requested permission to send articles on YOUR SECURITY BLANKET to the Journal Editor for inclusion from time to time. Permission was granted by the Board.

GUILD FILMS FOR CHAPTER PROGRAMS Two new films by Randy Woltz were viewed and approved for distribution to chapters and seminars on request: ACTION CENTERS and HERMAN KOFORD. When copies are available requests will be invited through a notice in the Journal.

EXAMINATIONS - COPYRIGHT To be obtained as soon as possible, if feasible.

EXAMINATIONS - REMOTE AREAS Tuning Test Committee to pay particular attention to needs of remote areas, cost and availability of equipment needed for the test.

EXAMINATIONS - CERTIFIED TUNING EXAMINERS The board approved a requirement that a CTE must have been a Registered Technician for at least one year before being approved as a new CTE.

EXAMINATIONS - NEW CTEs The board approved addition and a full list will be published and distributed to all chapters.

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#### JUNE 7th CHAPTER MAILING

Chapter presidents were mailed the June chapter mailing on June 7th and the contents included:

Treasurer-Secretary Charlie Huether's annual report  
The International Relations Committee report on the meeting in Switzerland  
The University Technicians Committee annual report  
Notice about the San Francisco Flea Market  
Individual mailings intended for certain chapters only (transfers, etc.)

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#### SPECIAL NOTICE ON CHAPTER MAILINGS

In future chapter mailings will be sent out on the fifteenth of the month instead of the seventh. The mailings will be planned to be in the hands of the chapter presidents before the first of each month so that chapters holding meetings early in the month will be sure to have relevant information in time for announcement and distribution to the members in attendance.

PLEASE WATCH FOR THESE CHAPTER MAILINGS - THEY CONTAIN IMPORTANT INFORMATION.