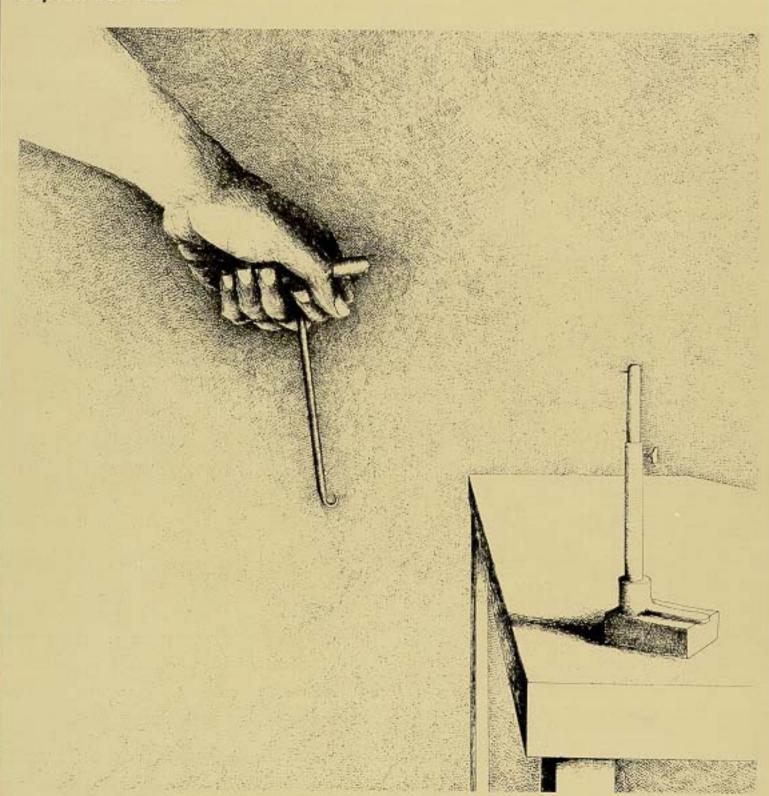
Piano Technicians Journal

September 1982



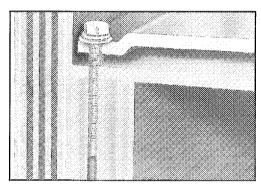
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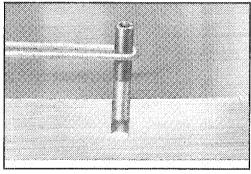
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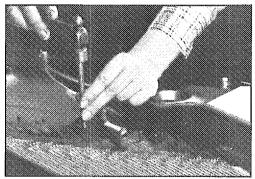
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Piano Technicians Journal

Official Publication of the Piano Technicians Guild

September 1982 Volume 25, Number 9

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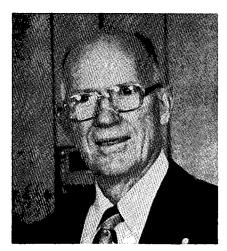
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PRESIDENT'S MESSAGE



Ernie Preuitt President

nce when I was in the eighth grade, my mom wouldn't let me go to the Boy Scouts meeting because I had a cold. That night I was

elected patrol leader. Once when the Piano Technicians Guild Convention was held in Calgary, Chuck Burbach didn't attend for some such reason. He was elected Regional Vice President. This year I had all good intentions of attending, but had to cancel upon the advice of the M.D., and you guessed it — I was elected President.

Of course it was rather expected, and I will be ever grateful to the nominating committee for staying with me, and to the Council for following through with my election. It goes to show you what a well regulated organization we have when both the person nominated for President and the Executive Director can't attend and yet things run as smoothly as they do.

Now my big task is to get along with everybody, particularly the new Board. I feel somewhat like Casey Stengel when someone asked him how to manage a baseball team. He said,

"First find the five guys who don't like you and then keep them away from the four who are undecided."

No, I'm sure the new Board is nothing like the team Casey described, for I have known all of them for many years. I expect the fullest cooperation from all of them, and am extremely excited about working with you, the membership and readers of the *Journal*.

Though I did not attend, I did get an opportunity to speak (via tape made while in the hospital) at the closing luncheon. For the benefit of those who could not be there, what follows, among other things, are a few of the remarks I made.

Closing Luncheon Acceptance Speech

MR. PRESIDENT, ILLUSTRIOUS PAST PRESIDENTS, FELLOW BOARD MEMBERS, DISTINGUISHED GUESTS, FELLOW DELEGATES AND MEMBERS ALL —

t is with the deepest of gratitude that I say thank you, Sid, for completing a most difficult year. Yes, you and Alice were able to make a delightful trip to China, which after reading about it, I felt as if I were there with you. After buying the new store with the many problems that came with it, I'm sure it was a painful decision for you to pass up your nomination for another year. Yet you kept on top of the Piano Technicians Guild topics and did a most admirable job. I shall always be grateful for your hanging in there and completing a difficult year.

One of the happier and more secure feelings I have at this time is to know that Charlie Huether is standing so close beside me, and I feel confident that he will fulfill my duties during my absence. The Piano Technicians Guild has had many "greats" and Charlie stands as a giant among them.

I was so pleased when Ron Berry was nominated for Secretary-Treasurer, for he was the first of my



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two choices. Ron has done such a tremendous job on the Examination and Service Standards Committee that I am sure that effort will be carried over into the Secretary-Treasurer's job.

My greatest sorrow is that I cannot be here in person with you. I promise not to bore you with my operation, now or in the future. However, with a little encouragement (and a small fee) I will display any and all scars. As for right now, my belly looks much like the map of the Atchison, Topeka and Santa Fe railroad. Someday, with the help of scars from operation past, I may be known as "Scarbelly Capreuitt".

Here is some "food-for-thought" about what it means to be a leader, which I have taken the liberty of quoting from the Neighborhood Council magazine of Independence, Missouri.

"I went on a search to become a leader. I searched high and low. I spoke with authority and people listened but alas, there was one who was wiser than I and they followed him.

"I sought to inspire confidence but the crowd responded, 'Why should we trust you?'

"I postured and I assumed the look of leadership with a countenance that glowed with confidence and pride. But many passed me by and never noticed my air of elegance.

"I ran ahead of the others, pointing the way to new heights. I demonstrated that I knew the route to greatness. And then I looked back and I was alone.

"What should I do, I queried? I've tried hard and used all that I know.

"And then I listened to the voices around me. And I heard what the group was trying to accomplish.

"I rolled up my sleeves and joined in the work.

"As we worked I asked, 'Are we all together in what we want to do and how to get the job done?"

"And we thought together and we fought together and we struggled toward our goal.

"I found myself encouraging the fainthearted. I sought the ideas of those too shy to speak out.

"I taught those who had little skill. I praised those who worked hard.

"When our task was completed, one of the group turned to me and said, 'This would not have been done but for your leadership.'

"At first I said, 'I didn't lead, I just worked with the rest."

"And then I understood: leadership is not a goal. It is a way of reaching a goal.

"I lead best when I help others to

use themselves creatively.

"I lead best when I forget about myself as leader and focus on my group, their needs and their goals.

"To lead is to serve. To give. To achieve. — TOGETHER."

Yes, together we can achieve anything we desire.

Yes, the Council has spoken on the new tuning test. It will fail miserably if too many of us pull in different directions. I think it was Charles Kettering who said, "If you are doing something the same way for six months, better

research it out and find what's wrong." Now I'm not advocating that the testing procedure be changed semi-annually. But if a change is in order let's not be afraid to do it. The worst thing that can happen to this procedure is to "bad mouth" it without offering something better. Let's give Chris Robinson and his committee all the help we can and prove that this is the best thing to come along in the Piano Technicians Guild for some time.

Another of the priorities I would like to push this coming year is making the public more aware of the Piano Techni-



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cians Guild.

Jim Bryant has some great and innovative ideas. I'm sure if all of us walk beside this committee, we will see some PR like the Guild never dreamed of. We may have to start with little or no money, but start we must, and succeed we will.

One of our newer innovations is the Foundation. It consists of the Steve Jellen Memorial Fund, the Scholarship Fund, and the Research Fund. This is in no way a part of the emergency reserve fund, which must be repaid and maintained. The Foundation is strictly endowed by individual and/or corporate contributions, and all gifts are tax deductible. For these programs to be successful, they must and will be fully explained through the pages of the Journal and in personal correspondence. In this way, I am in great hope that the Foundation can be further explained, fully believed in and fully subscribed to.

We have not, these past two years made the profit on the convention that we have budgeted for, but thanks to good management we are still solvent. the RVPs will tell you that I have not been overly anxious in allowing expenditures. I see little relief in the coming year, so get ready, fellow, when I make an appearance don't play "Hail to the Chief", but "Hail to the Cheap".

All kidding aside, unless something devastating happens, with the kind of financial management we have experienced these past few years, we are in no real danger. If you don't think we are better off now than in the past, you had better separate your facts from your fiction.

We have so many things going this year that it would take all day to explain them fully. Membership, both old and new — transfers, which needs much straightening out — chapters, both large and small — programs — and new and innovative program development

All these projects are to be overseen by committees, strangely enough made up of individuals.

A few days ago, while talking to Stanley Oliver about a committee appointment, he made the remark that he was going from oblivion to extinction. After my explanation to him for the switch, he saw the point and gladly accepted, for though in a small way, he saw his niche and stepped in.

Once there was a little twist can opener that, after the purchase of an electric can opener, got pushed all the way to the back of the utility drawer in the kitchen cabinet. The little can

opener lay there for many years, and felt left out of all activities. One day, as has happened here so often, a storm caused the power to go off. Dinner had to be served and with no electricity there was no way to open the several cans of food needed for the meal. Suddenly the lady of the house remembered the little can opener. She hunted frantically, and after dumping the contents of the drawer on the counter, she discovered the little can opener. The meal was a success despite the lack of electrical current. The little can opener, after all, was needed when his time came.

Each of you, no matter how insigificant you feel, have a place in the Piano Technicians Guild. Don't retreat to the back of the drawer, but stand to the front and say "Here I stand, use me." Don't worry, when your time is at hand someone will say, "Come, it's a small job but you are needed."

As for me, I intend to walk tall. I well remember my mother telling me how to walk to school on that first day — feet straight, steps high, chest out, chin held high. I did all these things the first block, then I stepped in a gopher hole, skinned my knee and was fifteen minutes late on that first day of school. Now that is a great way to walk, but once in a while I have learned to lower my eyes and see what is immediately in front of me.

I would like to leave you with these three essentials for a successful Piano Technicians Guild. Let's try them this year and see how they work:

- Committment to Growth for if we do not grow we become stagnant.
- Effective Communication Skills If we do not effectively communicate we will never understand each other.
- Learning creative use of conflict —
 If in our conflict we escape creative learning it remains just that conflict.

Now I have left out the most important part of my life and success in the Piano Technicians Guild. For if it were not for her, many of you would still be trying to read my writing. My wife and perennial convention attendee, Lu, will be by my side through the coming year. And now, after a few more essentials are disposed of, as the final act of this closing luncheon and under the leadership of Charlie Huether, let's shake hands with our fellow technicians (maybe even kiss a few of them), and join together in singing "Auld Lang Syne".

SEE YOU IN NEW ORLEANS IN 1983!□

Letters To The Editor

Dear Don:

Your appearance was sorely missed at our Convention and I hope this letter finds you in the best of health.

Joe Epler and your staff should be highly commended for their efforts in maintaining a smooth operating Convention. It is a pleasure to have such a group handling the "Rough Roads" of a Convention.

When I was first informed that you were unable to attend, all thoughts of confusion entered my mind — after all — the "BOSS" was not here. This proved another point to me. It was that your staff carried the ball, although I'm sure they all had to add an extra something so that your absence would not be a dissenting factor at this Convention. I can say all this with authority because of my previous involvement with you and your staff. It was my greatest pleasure, and I'll be looking forward to being in your company in the near future.

Sincerely, Walt Sierota

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149 E. HARRISON ST. PARAGON, INDIANA 46166 Dear Mr. Santy:

Since my marvelous trip to the Silver Anniversary Convention of the Piano Technicians Guild, I have been wondering how I can say thank you to all the people who gave me personally such a good time. I haven't been to a Convention since the New York one eight years ago. This was my 18th National Convention since I joined A.S.P.T. in 1947, and it was certainly a wonderful affair, showing as it should, the good fellowship and willingness to work of its widely separated membership brings us closely together.

I wish I could thank each person separately but I would be bound to forget just one name and spoil the whole thing. Of course for me the biggest event was the banquet which happened to come on my birthday, and you can see how it really pays to be born in the early part of July. That is when the Conventions are!

I was also invited to the Past Presidents' dinner too, an honor I've never had before.

I got only a small taste of the classes, choosing the ones of most interest to a "post-graduate" who doesn't even tune her own piano anymore, but one thing that specially struck me was the number of young women who are certainly actively a working and intelligent part of the organization. I have always felt that piano tuning was as sensible a career for a woman as for a man. We all can use each other's help occasionally.

I shall have to admit that "tuning" was my thing, of course, including the necessary "little" things like regulating, voicing, etc., BUT to buy an old piano, rebuild it and sell it, I never thought of such a thing. Now the girls do that too. Another way in which the Piano Technicians Guild has grown.

One name I will mention because he is the unknowing cause of my attending the Convention. That is Dick Bittinger. He phoned me from Philadephia a while back to ask about some of what went on when I was NERVP before he held that job. Then he said "Goodbye, See you at the convention", and I said "Oh no, I cannot possibly go". So you see what happened.

Special greetings to all my oldest friends who are really the ones I went to see.

Thank you all very much-

Sincerely, Hannah Grover





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THE TECHNICAL FORUM

Jack Krefting Technical Editor

lmost every month one or more of our correspondents wants us to mention the brand name of a particular product as being the best or most suitable for a particular purpose. Sometimes we do, but more often we do not, for a variety of reasons. For one thing, we have no testing facilities and few if any opportunities to scientifically compare brands; and it is surprising how often the recommended product was the only one tried by recommending technicians. It seemed to work all right for him, so he used that brand exclusively until it became, in his mind, the best.

Whenever we do make an exception and give a free plug, it is a judgment call based on our guess that the plug will be more beneficial to the technicians than to the manufacturer of the product. An example of this will be seen below in our mention of a 3M product which we have not tested. We are not necessarily endorsing it either, but rather, simply passing along the information as received.

TECH TIPS

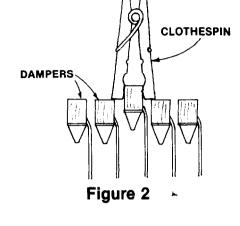
erald Foye, who has a lot of machine shop experience and who has contributed to these pages before, has another idea to share:

"Scotch-Brite (trade name of 3M product) is a most useful product. Pads are available at hardware and home improvement stores. The material is color coded as to work grade or usage. White is fine (the most useful one for me), green is medium, brick is heavy duty and there are industrial grades also. Disks of the brick material are available from industrial supply houses and can be mounted on polishing arbors.

"Uses for the pads are numerous, a few of which are: removing light scratches from plastic key tops (follow with buffing to restore gloss if needed), brass polishing, refinishing applications (used as steel wool without the mess), polishing strings, polishing balance rail pins, etc.

"Discs, mounted on an arbor, are used for rough polishing of brass components (follow with cloth polishing wheel), initial buffing of ivory key tops that have been reglued, and polishing of some plastic parts. It works especially well for buffing the tops and sides (wood portion) of keys to remove grime without removing wood. These wheels are safe and easy on fingers, but they tend to wear rapidly. Sometimes I stack them for greater width.

"Here is a tool I made up for machine polishing balance rail pins. It is used in a drill motor (See Figure 1...ed.). The inside is stuffed with white



Scotch-Brite, cat. #7411. The material is rolled, then stuffed in arbor. Has to be replaced about three times for entire operation. It was made on a lathe but with a bit of ingenuity it could possibly be made with a drill press and whatever else you have available."

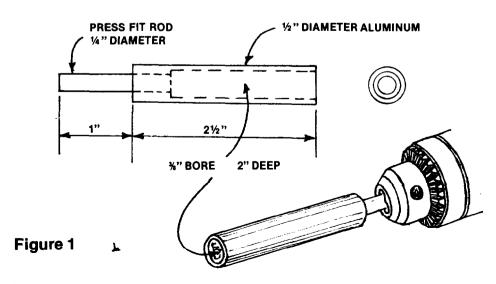
Gerald F. Foye San Diego Chapter

ee Sankey of Boerne, Texas, tells us that he uses a livestock marker for fitting pinblocks. He sent one so we would know what it was, and it looks like a big red crayon, covered with a cardboard cylinder. It is about an inch in diameter and about five inches long and is available (in Texas, anyway) in several colors. Lee likes the red because it shows up well on the pinblock.

Next we hear from Steve Davis, who has an idea on setting the upstop rail:

"We often find a grand piano with the damper stop rail well out of position, allowing damper levers to fly off the end of the key and come down with a noticeable bump. Adjusting this rail can be tedious and time-consuming. Here is a shortcut:

"Cut about '4' off the tips of eight common wooden clothespins. Now, with the action in the piano, depress a sharp key near the end of a damper section and suspend the damper head in the raised position with a clothespin (See Figure 2...ed.). Repeat this pro-



cess at each end of each damper section. Remove action and drop the stop rail down gently to the suspended damper levers. Tighten stop rail screws. This should put the rail very close to the correct position.

"Another way to save labor here is to incorporate stop rail adjustment with other final regulation steps, such as sostenuto adjustment, to avoid removing the action solely to adjust the stop rail."

Steve Davis Troutdale, Oregon

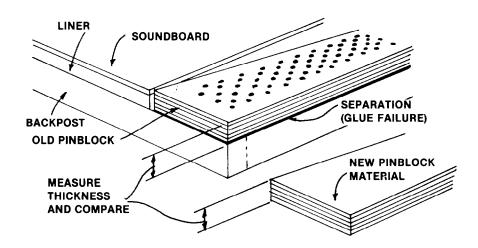
VERTICAL PIANO REBUILDING

ast month we discussed downbearing and sidebearing, particularly noting that these are directly affected by the placement of the plate. We must emphasize that the thickness of the pinblock, an important consideration in the grand piano, is vital in the vertical. The plate and block assembly cannot be lowered at will in the vertical, at least not without major surgery, and the thinner the block, the more downbearing will result.

Pinblock replacement usually requires the disassembly of the case, even to the point of knocking the sides off the back assembly. There might be clearance for the plate without removing the sides, but they hamper the work on the block to such an extent that the technician will probably decide to knock them off and be done with it at some point in the operation even if that weren't part of the plan. If a router or circular saw is used in removing the old block, for example, neither will go to the ends of the block if the case sides are in the way.

With the piano on its back on a tilter or horses, remove the usual case parts plus the bottom board (with pedals attached), toe rail and keybed. It is usually better, from the standpoint of cosmetic problems later, to remove the keybed from the arms and leave the arms attached to the sides, rather than attempting to remove the arms and keybed as a unit. The sides are ordinarily not fastened to the back with screws or dowels other than a pair of locating dowels or pins, so getting them off is usually a matter of breaking the glue joint. A large rubber mallet will work better than a regular hammer with a padded block because with the former you still have one hand free to

Figure 3 Old Block Thickness vs. New Block Thickness



catch the side when it pops loose. If heat or acetic acid is used, remember that other glue joints in the vicinity could be affected as well.

When the sides have been removed, the usual result is that a fair amount of veneer from the inner face of each side has been deposited on the end of the back assembly. It is best not to disturb this surface by scraping or sanding, as that would necessitate reveneering the inside of each side or removing veneer and crossbanding as necessary for a good gluing surface. That, in turn, would change the piano's dimensions by a small amount.

Having removed the case, the strung back is ready for disassembly. The existing scale should be recorded if that information is not readily at hand, and if necessary a paper pattern should be taken for bass string dimensions. Take more notes than you think you will need upon reassembly, and you might end up with almost enough. Remember that each plate is slightly different from its brothers, and that when the piano is strung the action must be mounted so that the hammers will line up with the strings. It follows that the keyboard must be aligned with the action and that the case parts will then be made to fit. If the piano can be reassembled as it was originally, then the keyblocks will be usable and things in general will more readily fall into place. There will be enough remanufacturing, refinishing and onthe-spot fabricating as it is, take my word for it, without making it difficult by failing to take measurements during teardown.

Remove the strings and tuning pins, bore the plate for locating pins as we discussed last month, and remove it from the back assembly. Keep the screws in order, preferably stuck in a piece of cardboard marked with the serial number of the instrument. Take note of the presence or absence of a plate flange, as this will make a big difference in the way the piano is reassembled later.

Inspect the old block, looking specifically for delamination, signs of doping, fit to the flange if any, and possible separation of the block from the rest of the back. If such a separation exists along a glue line as shown in **Figure 3**, the easiest repair method might involve popping the block out with a chisel along the separation line. This is a great method on paper, as it looks good and should work well.

New England Conservatory

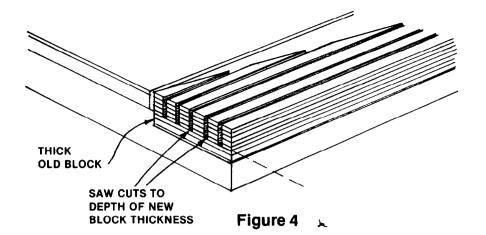
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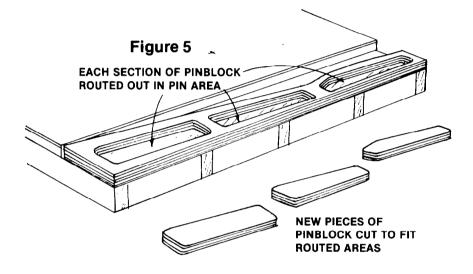
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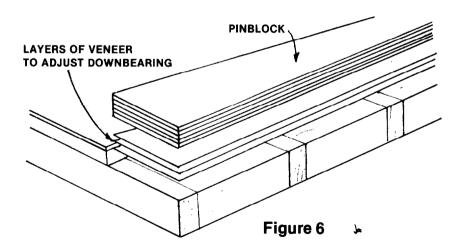
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It won't, of course. Not because the glue line won't separate cleanly, although in retrospect I must admit that it usually won't, but because either the new block material is so much thinner that extra material must be added; or the old block material is thinner than the new and the existing tuning pins penetrated the back beyond the thickness of the pins. Trying to line up

the new pinblock and plate so that the pins will go through new holes in new material and then into old holes in old material, still with some semblance of evenness of torque, is an exercise in futility. In my experience the old block must be removed to the extent of the old hole depth, otherwise there can be no reasonable hope for good results.

Sometimes the old block will be real-

ly thick, thicker than the pin penetration would dictate, and the new block material is thick enough for full pin penetration but thinner than the old material. In this event, taking into account the downbearing of course, the old block may be only partially removed by routing or chiseling it to a prescribed thickness. It may be desirable, particularly if it will be chiseled away, to first make several cuts as shown in Figure 4 with a hand-held circular saw, to the precise depth of the thickness of the new block material. The saw cuts are a constant reminder of the proper depth, and of course the material thus removed doesn't have to be chiseled out.

Another method that works well in situations where the downbearing will not be altered is illustrated in Figure 5. A section at a time is routed out to precisely the thickness of the replacement material, and a new piece is fitted into the hole. It may be attached with glue if the fit is good - or with epoxy if it isn't — and it will serve admirably so long as the basic structure of the old block is sound. It also works well in certain antique pianos where the block either isn't level or for some other reason won't readily part company with the back. If the piano has an open block, the restoration will be enhanced by the addition of a face veneer on the block. Traditionally, such veneers are of birdseye maple, curly maple, rosewood or burled walnut.

Incidentally, if the piano has an open pinblock it is necessary to make a paper or Mylar pattern of the tuning pin holes before the old block is removed. Cut the pattern to just fit the plate openings, mark the tuning pin locations, and save the pattern for drilling later. Also note the drilling angle and keep that information with the teardown notes. We will discuss drilling techniques in another issue.

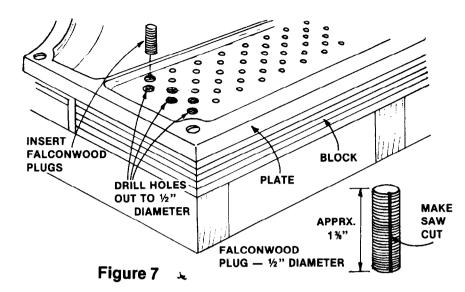
Let's imagine a circumstance where the old block had to be completely removed — because of a glue failure, dope in the block or just plain punky wood. For whatever reason, we have removed the old block and find that our new material is slightly too thick or thin. In the former instance I would suggest running the new material through a planer until the downbearing is correct. If it is too thin, build it up with layers of hardwood veneer as shown in Figure 6. If the veneer will not lie flat to allow an accurate downbearing measurement before glue is applied, iron it flat with an ordinary household iron. This will also make it temporarily and slightly thinner because the ironing will

remove moisture from the wood cells.

There will be unusual situations — I can see my mailbox now - where the usual techniques must be modified: particularly if we are talking about old pianos, there were so many different manufacturers that the construction varied considerably. Some used a builtup bass, with or without an open plate. which should be rebuilt to the original dimensions with pinblock material. Some will have a three-quarter plate or a multi-piece plate. The latter is interesting in that the pieces are held together by the compression of the back; when the strings are removed, the plate falls apart. Some were built with negative crown and ribs on the bridge side the board, and a few had ribs on both sides!

In some instances, for a variety of reasons, it might be considered advantageous to plug the block rather than replace it. This method can be viable, subject to certain conditions. Provided the plugs are thick enough and long enough to provide solid support for the pins, and assuming the surrounding material is structurally sound, plugs will work. They may be made with a plug cutter from pinblock stock, or purchased from Cliff Geers or anyone else who manufactures plugs from good block material. They may be installed as shown in **Figure 7**.

The big advantage of plugging is that you don't have to tear the piano down as far; and in the event of a really unusual piano with construction features that discourage major surgery, plugging might actually be easier than replacing the block.



Don't count on that, though. Plugs are more expensive, both in terms of purchase price versus a new block and the time it would take to manufacture 230 or so plugs. It can be done from scrap pieces of stock, sure, but a decent plug cutter costs about \$25 or \$30 and will burn up in dense stock if compressed air isn't constantly playing on it. Waiting or the cutter to cool down between plugs could mean that cutting the set would take days or even weeks, so a compressor is a must.

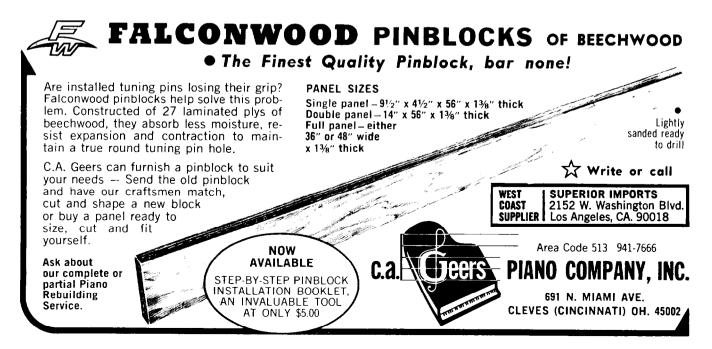
If the plate is webbed (closed block), the web must be drilled out to a half inch at each hold unless the plate is removed during the plugging process; and if one is to go to the trouble of removing the plate, some of the previously described options would have more appeal.

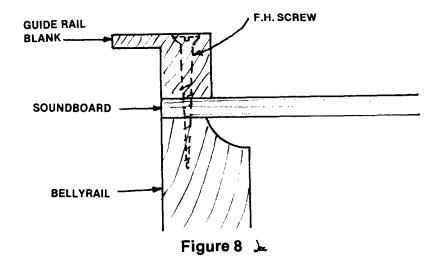
Plugging can create problems where pins are close together, too. It is

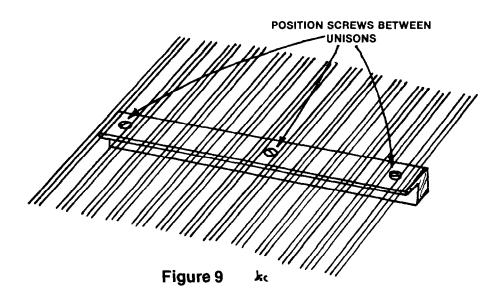
sometimes necessary to drill out and plug every other hole, then allowing the glue to set before proceeding, simply because the holes will overlap and if all were drilled at once the block would look like Swiss cheese. As in everything else, there is no substitute for good judgment.

It goes without saying that the plugs must be plugs, not dowels, and that they be scored vertically before installation so that the pressure of driving them does not delaminate the block or prevent full penetration. This pressure can be air or glue or both, and must be relieved. Plugs must be driven firmly with two or three hard blows, otherwise the glue will grab prematurely because of the closeness of the fit.

Next month in this space we will discuss the fitting and final installation steps







ment is a two-piece rail. The bass rail is taller, usually by about a half inch because that's about how much higher the bass strings are in overstrung scales. We don't know which rail we are considering in this case, but it doesn't really matter because the procedure is the same.

I would fit the new piece with the old piece or pieces which are to be retained in position to be sure of clearance from side to side. The fore-and-aft position of the rail is almost always dictated by the front edge of the soundboard—line up the front of the rail with the front of the board, drill and countersink the screw holes, and mount it as shown in **Figures 8 and 9**.

The blank should already have a scribe line along its length, so we don't have to locate the hole positions fore-and-aft; but if by chance your blank is not so scribed, do so with a marking gauge as shown in **Figure 10**. The distance from the front edge of the rail is critical to the scaling of the piano, so be sure to duplicate the original; resist the urge to get creative at this point, because that could get you into trouble.

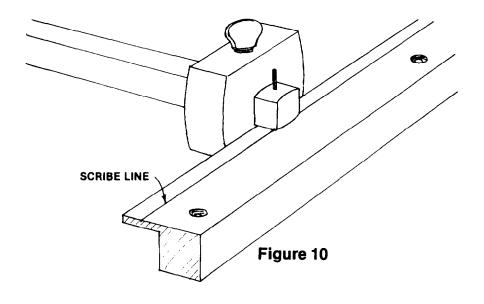
Now make a marking stick as shown Figure 11. Note that it is oval in cross section so that it may be turned to touch the strings on either side regardless of the scale spacing. The marking stick has a sharp point embedded in its tip, and is long enough that it can be used with a square on the strings as shown in Figure 12. Twist the stick until it touches the strings on both sides, square it with the trysquare, be sure the tip is in the scribed groove, and then tap the stick to make a mark where the center of the hole will be. Do this on all the unisons which this rail

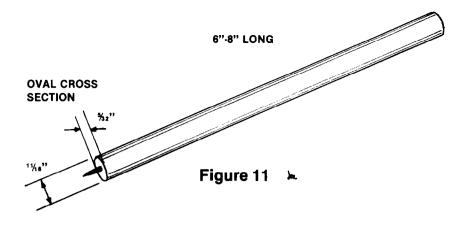
MAKING A DAMPER GUIDE RAIL

"I am rebuilding a grand piano which, at some point, had the damper guide rail cut up and spliced back together in a very rough way. I have a new blank from the manufacturer and would like to know what would be a good way to locate and drill it so the holes will end up in the right places."

Miriam Graham Santa Fe, New Mexico

Damper guide rails come in two, three or four pieces, depending on the make of piano, but the most common arrange-





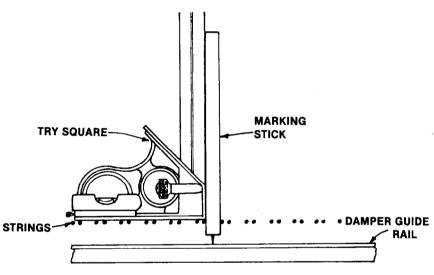


Figure 12: 🟃

will serve, including the outside one at the far end — it's usually no. 1 or no. 67 that's forgotten. To get the proper spacing for the first hole in the bass, hold the stick at the same twist as was used to locate the second hold. The first hole will then be as far to the left of the second as the second is from the third, even though there is no string to the left of the first hole.

When the holes are all marked, remove the mounting screws and take the rail to the drill press for drilling. Be sure to countersink the undersides of the holes before attempting to bush the rail. The countersink provides a place for a spot of glue to hold in the bushing, and also reduces friction by reducing the cross section of the rail where the wire passes through. If we forget to countersink, we will have noisy dampers even if we don't glue the cloth in, because the added cross section will increase friction and force us to enlarge the holes beyond a desirable amount.

CENTERPIN DRILL SIZES

Tom Harr of Bainbridge, Ohio, has written to discuss not only the above but also a few other interesting topics. Here is part of his letter:

"...I am making up or adapting replacement action parts for old. obsolete or odd-ball piano actions, and I have a problem about finding a drill bit appropriate for #20 centerpins. For a good fit in the 'birdseve' or frazine the hole should be about 0.002" under the size of the pin, which is 0.050" so the hole should be 0.048". As it happens. there is no drill bit commonly available in number (wire gauge), fractional inch. or metric size which is a usable approximation. How do action manufacturers do this? Order specially-made drill bits? How does a technician

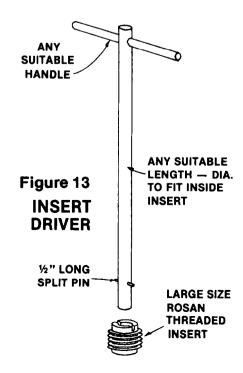
bashing out hand-made parts do it? . . .

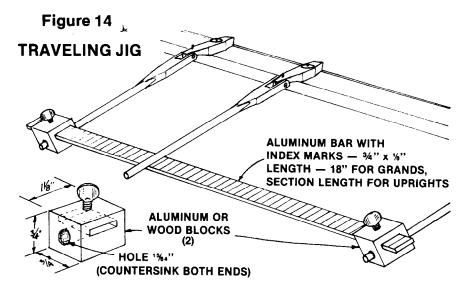
"I was gratified to see that someone finally wrote about the virtues of the threaded steel inserts which can be obtained from Brookstone and Craftsman Wood Supply. I've been using these things for years to repair stripped-out screw holes in lyres and music desks. but never got around to writing to the Journal about them. Here is a tip about using the large size for lyre repairs: It is very difficult to drive the large inserts straight up into the bottom of the keybed so that the bolts through the lyre will engage the threads properly. It is also hard to find a screwdriver large enough to fit the slots in the insert, which makes it even more likely that the thing will start cockeved in the

"... Get a piece of drill rod that just fits the inside of the insert and mark the point where the center of the driving slot is when the rod is inserted to full depth. Drill through the rod at this point to take a ½" long pin (See Figure 13...JK). Drive it in so it protrudes equally on each side of the rod and file flats on the pin to fit the driving slots in the insert. Put a suitable handle on the other end of the rod. Now you can easily turn the insert into the keybed and keep it straight!

"...last comment, for now: The gadget made from a coat hanger, a damper head insert, and a centerpin for installing bridle tapes was a Godsend! Out with corktips and clipons!"

Thomas H. Harr Bainbridge, Ohio





Tom is right in stating that the drill size should be about 0.002" smaller than the centerpin, and that there is no readily available drill bit 0.048" in diameter. Manufacturers order special bits, which would be expensive and troublesome for the technician; but there are options.

In making replacements for obsolete action parts, my first choice would be to use a 3/64" bit, which measures 0.0469", with a No. 19½ centerpin, which measures 0.049". This would give an interference or press fit of 0.0021", which is good. A slightly larger hole, measuring 0.0472," would result from the use of a 1.2mm bit, but such a bit would require a special order. It is probably easier to gather available bits and only then decide what size centerpins to use, within reason at least.

GADGET OF THE MONTH

Steve Davis has contributed another interesting gadget, illustrated in **Figure 14**. We'll let him describe it:

"This tool is inexpensive, easy to make, and will improve your speed and accuracy in hammer butt and grand shank traveling.

You will need:

- 2 thumb screws 10-32
- 2 small blocks of maple (aluminum is better but will take more time to make)

1 aluminum bar 1/8'' x 3/4'' by approximately 18'' long machinists layout dye (optional)

"Drill a 15/64" hole lengthwise through the blocks and cut a slot through side of blocks for the aluminum bar. Position the hole and slot so that they intersect each other 1/16". Now install a thumb screw so it will press on the bar when installed. Coat the bar with layout dye and scratch lines 1/8" apart across bar.

"The first step in using this tool is to prove the trueness of the end shanks (or butts) in each section of the action. I put the flange in a vise and swing the shank (or butt with a snug fitting shank installed) up and down comparing it to a bar attached to the vise and parallel to the vise jaws.

"When you find shanks that are traveling in a straight line, i.e. they don't need any traveling paper or tape, install them on each end of action sections at 90 degrees to action rail. Now install untested shanks between these two on rail. Place aluminum bar in slots of blocks, end shanks in block holes and tighten thumb screws.

"Now lay untested shanks on top of the bar and lift up on end shanks observing movement of shanks in relation to lines on bar. Paper the flanges as needed for correct travel. You may need different length bars for various size action sections."

Steve Davis Troutdale, Oregon

READER COMMENT

irst, Francis Adams of Toledo poses an open question to all of us:

"Since I have exhausted the resources of a few Universities, perhaps you could pose this question to the Field: What is the correct frequency for tuning A or C in a hurdygurdy? In my correspondence with one maker, I had the feeling that the pitch is arbitrary, but I find that idea a little hard to accept."

Next, Wayne Matley of the Puget Sound Chapter on the unison tuning controversy:

"Perhaps George Weilan said it best: A unison must be tuned well enough to tune from. The late George Weilan was a concert technician for Baldwin for many years and a member of the Guild since it's inception. Before that he traveled with Jose Iturbi as his personal technician succeeding Vic Jackson. George tuned using a tuning fork, tuning hammer and a single rubber mute. Each succeeding interval tuned and all tests were made from an open, unmuted unison previously tuned."

And finally, Ed Reineck of Summit Lake, Wisconsin, reporting back on an earlier plate repair:

"You will recall that one of the items in your Technical Forum of April, 1981 dealt with the repair of a cracked plate on a Bauer Grand. The repair was made in December, 1980 by two technicians from In-Place Machining Company of Milwaukee, Wisconsin.

"I tuned the piano on March 23rd, May 19th and December, 1981 and considered the repaired crack to be fairly satisfactory. The most recent tuning was made in April, 1982, and I still feel good about the repair. Some notes were 10-15 cents flat, but I attribute that to loose tuning pins rather than a change in the repaired area..."

IN CONCLUSION

ur thanks to this month's contributors for their excellent input, as always. Please send technical questions, tips, articles and comments for publication to me at this address:

Jack Krefting 3802 Narrows Road Erlanger, KY 41018

THE INTERNATIONAL SCENE

Fred Odenheimer, Chairman International Relations Committee

he Piano Technicians Guild 25th Convention is now history. It was a glorious affair, from the fireworks of the 4th of July, to Steven and Nadya Gordon; the pianists who performed at the banquet, and finally the closing luncheon. We seemed to be continually reaching high points as we attended each successive event.

The Technical Institute was excellent, the exhibits most interesting but one should not forget to mention the never-ending technical discussions occurring outside of the classroom.

Internationally, there were a number of meetings held with the organizing committee of JPTA; Mr. Kazuyuku Ogio, Mr. Shinji Otake and Mr. Henry

Haino, concerning next years IAPBT Convention in Tokyo. At this time, we can report a number of details: There will be an IAPBT Council and Technical meeting at the new Akasaka Prince Hotel, May 23, 1983, with morning and afternoon sessions. May 24th will find us in Hamamatsu visiting the Kawai Piano factor and on May 25th we will visit the Yamaha factor. Price for the convention package including registration, four nights at the hotels, three lunches and three dinners and all transportation during the convention, will be \$350.00 per person. The Auxiliary will have their own program on May 23rd.

Naturally, the exciting event surrounding the IAPBT convention will be the Piano Technicians Guild trip to Korea, Japan and China with sightseeing and visits to factories. Western Regional Vice President, Dan Evans, will probably have all the details by the

time this appears in print. Watch for his announcements published in the *Journal*

Providing there is enough interest, there will also be a less ambitious IAPBT-sponsored Japan tour; duration about two weeks, cost including convention expenses somewhere between \$2,000.00 to \$2,500.00. Look for more details in the October issue of the *Journal*.

To all of you who want to participate in the International meeting in Japan, absolute cut-off date for participation is December 15, 1982. Your convention fee of \$350.00 will also be due at that time. Through membership in "Friends of IAPBT" you can now directly support the ideals of the world organization. A membership fee of \$15.00 should be sent directly to the home office. Make check out to the Piano Technicians and specify to the "Friends of IAPBT" account.

The Piano Technicians Guild Orient Tour

Dan Evans Western Regional Vice President

he next meeting of the International Association of Piano Builders and Technicians (AIPBT) will be held in Tokyo on May 22, 1983. The members of the Japanese Piano Tuners Association (JPTA) have invited Guild members to

attend, and have planned a welcoming party, instant translations of the meeting, and a tour of Tokyo and two major piano factories in Hammamatsu.

The Piano Technicians Guild has plans to extend the tour to other parts of Japan, and also Korea and China for Registered Craftsmen and Allied Tradesmen.

The International Trade Research Institute of the Peoples' Republic of China has heard of our plans, and have officially invited a limited number of technicians to come to China to discuss piano making and merchandising. We are invited to visit piano factories in Peking, Shanghai and Guangzhou. The Chinese have also arranged for sightseeing, including the Great Wall, Ming Tombs, as well as a boat trip on the fabulous Li River, the fantastic caves, and theater performances. We will conclude the tour in Hong Kong.

Additional features in Japan will include visits in beautiful Nikko, Hakone and Kyoto. We will visit the Deer Park in Nara, and spend an unforgettable night in a ryokan, a Japanese style inn.

The Korea portion will include visits to two factories and sightseeing in Seoul.

The entire trip, beginning May 14, 1983, will take approximately 32 days. Due to the length of the trip (many technicians cannot leave their businesses that long), and the cost, (the Orient is expensive to travel), it may be possible to break the tour into portions: a) all three countries, b) Korea and Japan, c) Japan only, and d) Japan and China.

As soon as prices and details have been established by our travel agent, we will announce them, with application forms in the *UPDATE*. Mr. Halstead MacCormac, who so ably conducted our first Piano Technicians Guild tour of Europe, has again consented to be the tour conductor of this fantastic tour of the Orient. In the meantime, further information may be obtained by contacting WRVP Dan Evans, 4100 Beck Ave., Studio City, CA 91604. Phone (213) 762-7544.

Fred Odenheimer, chairman of the INTERNATIONAL RELATIONS COM-MITTEE, may also arrange a shorter tour of Japan, including the four days JPTA is hosting, for IAPBT members who are not affiliated with the Piano Technicians Guild. All Guild members, regardless of classification, would be welcome to join Fred's tour.

UNISONS — THE EFFECT OF TUNING ON PERSISTENCE AND TIMBRE

James F. Ellis, RTT Knoxville Chapter

First of a three-part series.

ABSTRACT

iano unison strings do not vibrate independently of one another. A small amount of mutual coupling affects the results of fine tuning, and produces a dual decay characteristic in the tone. A few writers have advocated slightly mistuning the unisons to increase the persistence and enhance the brilliance of the tone. and this has created confusion among some technicians. In this article, I review the highlights of the literature. explain the basic principles, and focus upon what happens, and why. I find that interference among strings is the main cause of the dual decay characteristic, and that the degree of fine tuning affects persistence, timbre, and stability.

INTRODUCTION

Studies conducted during the past four decades have shown that piano tones do not decay at a constant rate. Instead, the first part of the tone decays rapidly, and the remaining part decays slowly. We call the strong tone at the beginning of the note the "prompt sound", and the long lingering tone that follows the "aftersound". When we tune a unison, we not only get rid of its objectionable beats, we also change its tonal decay characteristic.

When I refer to "exact tuning", I mean tuning that is as perfect as one can make it. When I refer to "stagger tuning", I mean tuning that deliberately leaves the strings of a unison at slightly different frequencies. In stagger tuning, it does not matter which string is sharp and which is flat, as long as the amount of deviation is consistent from note to note. However, there are some exceptions, which I discuss later in this article. Due to limited facilities, my experiments were crude by laboratory standards; nevertheless, they corroborate a consensus that the dual decay characteristic of the tone arises from interferences, and they resolve the question of the importance of the "parallel" mode of string vibrations.

Relative sound pressure is measured in decibels (dB). This is a logarithmic scale, which indicates the ratio of one level to another. Each change of 20 dB in sound pressure represents a factor of 10. Therefore, a change of 40 dB is 10 x 10, or a factor of 100; and 60 dB is 10 x 10 x 10, or a factor of 1000.

BRIEF REVIEW

Decay Rates Measured

In 1947, Daniel W. Martin, who was then with RCA, measured and described the tonal decay rates of an upright, a baby grand, and an electric piano.¹ He measured the total sound (all the partials) without using the sustaining pedal, described both the prompt sound and the aftersound, and plotted

the time it took the tones to decay by 60 dB. From C₁ to C₈ in the upright piano, this time varied from 53 to 0.2 seconds. There were some wide variations in the decay rates from note to note - with some variations as much as 3 to 1. The most pronounced difference between the decay rates of the prompt sound and aftersound appeared in the third and fourth octaves. Martin found that the tones of the baby grand decayed in a manner similar to those of the upright. He also noted that the high-frequency partials of lowpitched tones persisted longer than the fundamentals of high-pitched tones. The electric piano was of the type that had strings and pickups, but no soundboard. Its decay rate was much slower than the other pianos tested, and the difference between the prompt sound and aftersound was much less. The changes in decay rate that were observed were attributed to slow beats.

Tuning Preferences Investigated

In 1959, Roger E. Kirk, of Baldwin, presented the results of his studies of listeners' preferences regarding unison tuning.2 Kirk had an artist tuner tune the unisons of a grand piano (notes E₃ through G₅) in five different ways at different times. The upper and lower strings of the unisons varied by 0, 0.5, 1, 2, and 3 cents relative to the center string. The left strings were tuned flat and the right string sharp, for total variations of 0, 1, 2, 4, and 6 cents. Kirk then recorded groups of single notes as well as musical passages, and later played the tapes back for a panel of listeners. Each listener then indicated which sounds he liked best, and which, in his opinion. sounded the most like a piano. Kirk's listeners comprised 102 students from classes in introductory psychology, and 21 others made up of music students and Baldwin personnel. His data indicated that the most preferred tuning was in the range of 1-2 cents total deviation. The data also indicated that the listeners with some musical background showed a higher preference for the sounds with less deviation than did those from nonmusical backgrounds. It was not stated

"Decay Rates of Plano Tones", by Daniel W. Martin, The Journal of the Acoustical Society of America, Vol. 19, No. 4, July 1947, pp. 535-541

²"Tuning Preferences for Plano Unison Groups", by Roger E. Kirk, *The Journal of the Acoustical Society of America*, Vol. 31, No. 12, December 1959, pp. 1644-1648

whether any of the listeners were serious piano student.

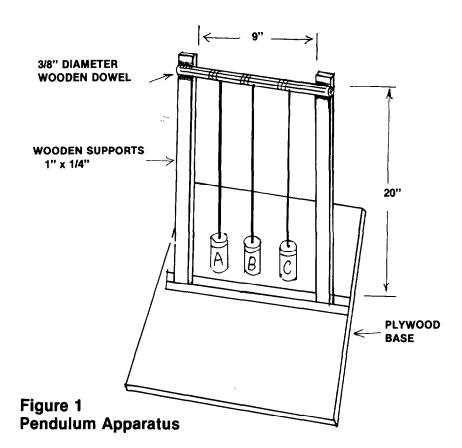
Some articles that have recently appeared in the Piano Technicians Journal, and other publications, have suggested that it is more or less common practice for piano tuners to deliberately stagger tune the unisons by very slight amounts in order to make the piano sound "brighter" or to give it a "singing" quality. In his article on "Non-Consonant Tuning" in the August 1981 issue of the Journal, Dr. Gerald Loeb states that perfectly beatless unisons produce lifeless effects, and that the technician can even do some kinds of voicing by fudging the unison tuning just right.3 In an article in the January 1979 issue of Scientific American, Dr. Gabriel Weinreich states that listeners prefer the sounds of unisons that have slight discrepancies in their tunings. He also states that he believes skilled piano tuners vary the mistuning to make the aftersound more uniform from note to note.4

Decay Rates Re-measured

Prior to the experiments conducted by Weinreich, Fletcher found that the different partials of a piano tone decay at different rates.⁵ An excellent article on the subject of piano-tone decay appeared in the May, 1979 issue of the *Journal*.⁶ I recommend that interested technicians review it, together with D.W. Martin's introductory remarks on page 15 of the same issue. The article describes how Hundley, et al., found that interference between strings, and mutual loading, were the primary causes of the dual decay rates of piano tones.

Differing Opinions

There are some interesting differences between Dr. Weinreich's conclusions and those of Hundley, et al., at Baldwin. (4.8) Hundley, et al., state that a single string vibrating alone does not exhibit the characteristic dual decay rate, but Weinreich states that it does. Hundley, et al., believe that the parallel mode of vibrating strings (strings vibrating parallel to the plane of the soundboard — horizontally in a grand — crosswise to the hammer stroke) is not a primary contributor to the dual



decay rate, but Weinreich believes that it is. I discuss these points in detail later in this article.

PHYSICAL FUNDAMENTALS

The Soundboard's Function

Contrary to a frequently-used expression, The soundboard does NOT 'amplify" the sound of the strings. The term, "amplify", suggests that energy is added from some other source. The soundboard does not do that. It does couple the energy of the strings to the air to make sound, and it can couple the energy of sounds in the air back to the strings to make them vibrate, someone may say, "Oh, but that's just semantics." Perhaps so, but this distinction is important if we are to understand what makes the strings of a piano behave as they do. For the benefit of piano technicians who are also radio operators, the soundboard is a mechanical "antenna", not an amplifier.

Mutual Coupling

Piano tones are generated by compound harmonic and inharmonic motions (vibrations) of the strings as they interact with the bridge and soundboard. These motions are not completely independent of one another. There is always some degree of mutual coupling, especially among the strings of unisons, which plays a significant role in determining the way the tone will decay. Before we can hope to understand how mutual coupling affects this complicated system of compound inharmonic motions, we must first understand something about the mutual coupling of simple harmonic motions.

Simple Harmonic Motions

The Demonstration Apparatus I like to use for this purpose is shown in **Fig.**1. The three simple pendulum bobs

- ³"Intentional Non-Consant Tuning -- Why and How", by Gerald E. Loeb, Piano Technicians Journal August 1981, pp. 17-19
- 4"The Coupled Motions of Piano Strings", by Gabriel Weinreich, Scientific American, January 1979, pp. 118-127
- The Plano Its Acoustics, by M.V. McFerrin, Tuners Supply Co., 1971, pp. 55-57 (original graphs by permission of The Journal of the Acoustical Society of America)
- *"Factors Contributing to the Multiple Rate of Piano Tone Decay", by Chase Hundley, Hugo Benioff, and Daniel W. Martin, Piano Technicians Journal, May 1979, pp. 15-23, Copyright 1978, Acoustical Society of America

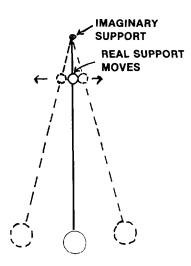


Figure 2-1 Light Springy Support

(A-B-C) are made of 35-mm film canisters filled with equal amounts of key leads (about 160 grams each), and suspended by thin fishing line from the crossbar at the top. The crossbar is a 3/8-inch-diameter dowel securely glued near the tops of two 0.25 x 1 x 21-inch long wooden supports spaced about 9 inches apart and secured to a firm base. The lateral flexure of the supports allows the crossbar to move back and forth as the pendulums swing. The fishing lines are wrapped a few times around the dowel and secured with clothespins to provide a convenient means of adjusting the length (tuning) of the pendulums.

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The Analogy is fairly obvious. The three pendulums are analagous to the three strings of a unison. The crossbar at the top is analagous to the bridge of a piano, and the springy supports represent the ribs of a soundboard. At this point, someone is sure to say, "But pendulums aren't piano strings!" Certainly! But pendulums will demonstrate some of the same laws of physics that govern piano strings, and they will do so with motions that are slow enough for us to follow. I recommend this simple device to the Sunday-afternoon experimenter.

Case 1: We brace the vertical supports so they can't move, and hang only one bob (A) from the crossbar. We start it swinging and accurately time it for about 200 complete swings. We remove the braces, and time the pendulum again.

Result: The pendulum swings a little more slowly with the braces removed.

Reason: The motions of the light springy support are in phase with those of the bob, and this increases the effective length of the pendulum and decreases its frequency. It is as if there were an imaginary support above the real support (**Fig. 2-1**).

Case 2: We suspend a heavy weight (10-20 lbs.) by a rope from the rafters of the shop, and couple it to the crossbar with a rigid member (mounting the weight directly on the supports would make the apparatus unstable). We start the pendulum and time it again.

Result: It swings faster with the heavy weight coupled to the crossbar.

Reason: The weight makes the crossbar act like a heavy mass. To achieve equilibrium, the massive support moves opposite to the motion of the bob, and this decreases the effective length of the pendulum and increases its frequency. It is as if there were an imaginary support below the real support (**Fig. 2-2**).

Case 3: We uncouple the heavy weight, and suspend a second bob (B) from the crossbar beside A. We adjust the length of pendulum B equal to that of A. We start A only.

Result: Soon B begins to swing as it lags behind A. The amplitude of B increases and that of A decreases until B reaches a maximum and A reaches a minimum. Then the process reverses itself until the energy is coupled back to A again, and the cycle keeps repeating.

Reason: When resonant masses

are mutually coupled by a common light springy support, the one that leads gives up energy to the one that lags.

Case 4: We re-couple the heavy weight to the bar. We start A only.

Result: Soon B begins to swing (as it did in Case 3), but this time it *leads* A. The process repeats as it did before, but the phase relationships are reversed to what they were for Case 3.

Reason: The massive support moves opposite to the motion of the swinging bobs in order to maintain equilibrium, and this reverses the phase relationships of the coupling between them.

Case 5: We uncouple the heavy weight and hang the third pendulum bob (C) beside A and B. We adjust all three pendulums to the same length, and start them all together.

Result: They stay synchronized as long as they continue to swing.

Reason: The motion of the crossbar provides mutual coupling that synchronizes all three pendulums. If one starts to get ahead, it gives up enough energy to the others to hold it back. If one starts to get behind, it receives enough energy from the others to make it catch up (Case 3).

Case 6: We detune pendulum B (middle) by making it slightly shorter. We start all three swinging at the same time.

Result: Bob B begins to move ahead of the others; then its amplitude decreases; then it falls behind; its

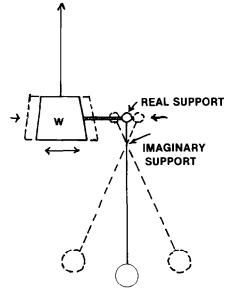


Figure 2-1
Massive Support

amplitude increases; it catches up and gets ahead again. This process repeats over and over. Pendulum B "hunts", first ahead, then behind, but it can't quite get synchronized, yet it never gains or loses a whole swing relative to A or C.

Reason: Pendulum B begins to moving ahead because it is shorter and its frequency is greater than the others. When B gets ahead, it gives up energy to A and C. Giving up energy to A and C causes B to lose amplitude (Case 3). When B's amplitude is diminished, its effective length becomes greater because the motion of the bar is a large portion of B's total motion (Case 1). This causes B to slow down, and it gets behind. Now that B is lagging, it begins to take energy back from A and C, so it builds up amplitude again. Now with B's increased amplitude, the motion of the bar becomes less in proportion to B's total motion, and B's effective length is reduced. With reduced effective length and restored energy, B catches up and gets ahead again. The cycle repeats.

Compound Inharmonic Motions

The "cases" I have described may seem complicated, but they are simple compared to what goes on in a piano. So far, we have been dealing only with simple harmonic motions - the fundamental frequencies of resonant masses. In the piano, we are confronted with compound inharmonic motions - all the inharmonic partials of the strings. To complicate matters even more, the bridge - soundboard assembly is springy, massive, resistive, and resonant in many different modes at different frequencies, with peaks and nodes and standing waves all over the place. It is no simple device, as was the pendulum apparatus. If the piano has a duplex scale, that adds still another dimension to the picture, but I don't discuss that in this article.

Continued next issue.

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50 Point Guide To Grand Regulation Part XXIII

Step -37 The Repetition String Strength

ext step on the 50 point checklist is number 37, adjusting the repetition spring strength. What we want is to have the springs adjusted as strong as possible, without the pianist feeling it work at the key. This allows the repetition lever to support the knuckle after the hammer is released from the backcheck, and enables the jack to return to its rest position as fast as possible. Note that during the actual playing of the piano action, the hammer does not rise in order to let the jack get back to its position. This is just the way that we think it happens, since that is the way we see it while regulating the repetition spring strength. What really happens is that the whippen drops, while the balancier supports the knuckle, leaving room for the jack to get back to its rest position.

Step #36 just previously performed was regulating the backcheck

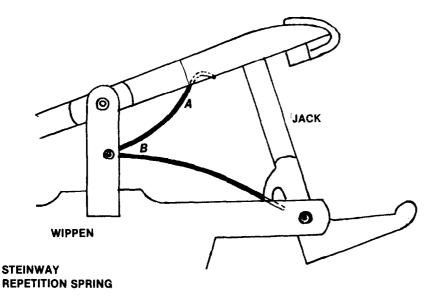
distance. Other than a very minor effect that the jack height has on the repetition spring (see After Touch February 1980), the backcheck distance is the only thing which affects the regulation of the repetition springs. This is why the backchecks and the repetition springs are always regulated as a pair, and in that order. A special note should be made, however, concerning the drop screw. If for some reason the drop screw is adjusted too far down, there will appear to be no rise in the hammer while checking for the correct repetition spring tension. The repetition spring will still do its job, but no rise will be seen. The balancier can not raise since the drop screw inhibits that rise. If this phenomenon occurs while regulating, simply raise the drop screw a little.

It is interesting that the repetition spring affects the drop as well as the drop affecting the repetition springs. If the strength of the springs is too weak, the drop will appear to be too great. Raising the drop screw will do nothing to eliminate this problem, since the cause is with the repetition spring tension (see After Touch February 1982). Besides this little interaction with the drop, the repetition springs mainly affect the jack height, indirectly affecting the hammer line. And at that, it only comes into play if the repetition springs

are not strong enough. As long as the springs have enough or too much tension, regulating the spring strength for all practical purposes affects no other regulation step. This is why I like to save the repetition springs until last when regulating Section IV of the 50 point checklist. As long as when starting you make sure that the repetition springs are strong enough, the other six steps (jack height, blow, let-off, drop, drip, and backcheck) can be perfectly regulated without fear of changing anything by adjusting the tension on the repetition springs!

We already know that the springs should be as strong as possible. This is to insure good speed of repetition. Also important is to have all 88 springs to be under the same amount of tension. This will give evenness of touch throughout keyboard. Believe it or not, if some springs are stronger than others, the pianist can feel this in the resistance at the key! The manner in which I adjust the repetition springs is to remove the action out onto my lap, the front of the keyframe resting upon my legs, the rear still sitting on the keybed. Starting at A#1 and working up one key at a time, I gently depress the key enabling the hammer to go through escapement and into check. Then I slowly release the key and watch the hammer rise. If the rise of the hammer is felt at the key, I immediately know that the spring is adjusted too strong. If it is not felt at the key, I watch the speed at which it rises. The speed should of course be as fast as is possible, and uniform throughout the keyboard, yet without any noticeable feel in the key. Although it may appear that the repetition spring strength is either too strong, too weak, or even just right, be aware that other factors can influence the speed at which the hammer rises when released from

1) Watch out for adjacent knuckles rubbing. This causes the appearance of a spring which is too weak. To correct, raise the hammer all the way until the shank is vertical. Holding the shank firmly to keep from ruining the center, file off some of the side of the knuckle with sandpaper. You may need to do



this a little to each of the knuckles on the sides that rub.

- 2) Check for hammer centers that are too loose or too tight. A too loose center will give the appearance of a too strong repetition spring. A too tight center will appear the opposite. If there is any question whether the center is correct or not, remove the shank and flange assembly and give it the "swing" test. This is a must for evenness of touch.
- 3) Another possibility is that the backcheck is incorrectly regulated. If the backcheck distance is too far from the string, it may give the appearance of a repetition spring which is too strong. The further from the string that the hammer checks, the more the balancier compresses. When the hammer is released from check, this greater compression may show up in a faster rise of the hammer. To correct, simply bend the backchecks to the desired distance, making sure that all 88 hammers check evenly. A checking distance of too close to the string will of course give the opposite effect. However, it is rare that the hammer will check too close and still function properly. This situation usually causes the hammer tail to rub on the backcheck on the way up or to bounce the hammer back to the string, not even going into check.
- 4) Again, if the repetition spring appears to be weak, it may be caused by the hammer tail rubbing on an adjacent hammer head. To correct, either align and square the hammers to the strings, travel the shanks, or taper the tail.

5) Lastly, on Steinway style repetition springs, an appearance of too weak a spring is often caused by dirt in the repetition spring groove and on the tip of the spring itself. Cleaning this groove and the tip of the spring was step number 22 on the 50 point checklist. Refer to After Touch November 80 for more information on this. Sometimes the repetition spring was not returned to it's correct position in the groove. If it rests outside this slot, it can give the appearance of too strong a spring. To check to see if this is the case, gently press sideways on the spring and watch to see if it slips into the groove or not.

While we are discussing Steinway style repetition springs, let us also touch on how to adjust them. (See drawing.) To release the spring, I take one hand and hold the balancier up. sometimes bending it away from the others a little to get access to the spring. With the Steinway regulating tool I grab the spring near point A and by pulling it down and out I release it from under the balancier. Then I reposition the tool at point B to hold the spring still and to insure that I do not alter the inner windings of the spring. which will affect how the jack works. With my finger at the tip of the spring, I put a very slight amount of pressure on the point B to increase the tension. The tool again grabs the spring at point A and holding the balancier with the other hand I slip the spring back into its slot. The tension of the spring is tested by releasing the hammer from the check and watching the speed of rise.

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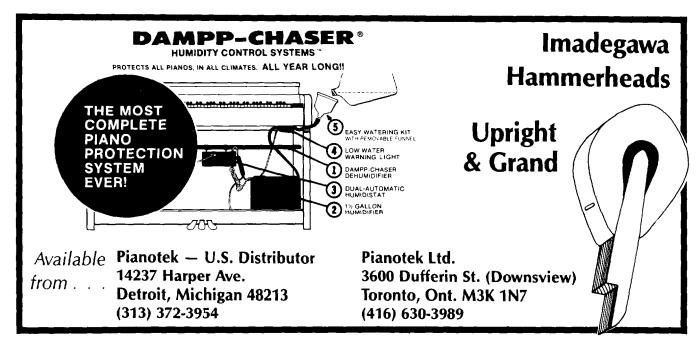
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If too much tension exists, the spring is ever so carefully adjusted with the tool at point B. I position the tool under the spring so that I can give it a slight upward movement. By flexing the spring at point B it is possible to weaken it. Experience is the best teacher. Do not alter the bend in the spring at point A to weaken or strengthen the Steinway style repetition springs.

In closing, a few words should be said about the Aeolian style brass screw adjustment for the repetition springs. Just like the brass drop screws, the repetition spring adjustment screws also become frozen. Zap them, or judiciously apply a drop of WD40 to them. If someone tried to turn them without realizing they were frozen, the screw heads are often butchered up so bad as to make it impossible to turn them with a screwdriver. To these I just apply a pair of pliers to turn them.



SOUND BACKGROUND

Jack Greenfield, RTT Chicago Chapter

EARLY KEYBOARD STRINGED INSTRUMENTS

Fourteenth Century Changes In European Music

he history of Western European music during the early middle ages is dominated by music of the church. The primary purpose of music here was to serve in the expression of worship. By the thirteenth century the organ had become the indispensible church instrument. Its function was little more than to set pitch and support vocal music.

During the fourteenth century, major social changes began the separation of religion from political control, science, and other activities which new philosophy considered the realm of human reason rather than divine revelation. The medieval political unity

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of Europe through bonds of the central church was broken as control was taken over by separate independent powers. The rules of many of these independent states were educated men with an interest in supporting arts and letters. Conditions were now favorable for great expansion in the scope of musical activity:

- Although there had been much secular music, before the earlier writers who were largely members of the church establishment devoted little attention to nonliturgical music. Now, however, secular music moved up in status. Music became an important part of court and civic ceremonies as well as social events and entertainment for all classes.
- 2. There was considerable development of many types of musical instruments and purely instrumental composition. "Cornetts and sackbutts" (trombones), harps, bells, and other instruments were used even in the church. Trumpets and drums were played for ceremonial events. A popular combination for social dancing included shawn (bagpipe), bombard (large oboe), and slide trumpet - valved instruments appeared several centuries later. Ensembles for chamber and other art performance included the recorder, flute, viol, guitar, lute, and other plucked string instruments now obsolete. Several types of new keyboard instruments appeared later in the century.
- The progress of secular music encouraged the introduction of more innovative diverse styles of composition and purely instrumental music.
 There was greater use of chromatically altered notes and polyphonic structure with thirds and sixths on strong beats.
- Standards of musicianship rose.
 Some instrumentalists and vocalists achieved virtuoso caliber.

An understanding and appreciation of music became a social necessity. With royal and aristocratic patrons giving their support, music became established as a real profession. Musicians, vocalists, and composers were employed as members of the staff of

royal and noble courts and households.

Alternatives To The Organ For Secular Music

he introduction of polyphonic and chordal composition created an especial interest in instruments which could play several notes together. The positive organ, a smaller but non-portable organ was used to some extent outside the church but did not gain much popularity, its intonation and tone quality did not blend well in ensemble with other instruments. The harp was not a suitable alternative. The fully chromatic eighty string harp was quite difficult to play and the smaller twenty-five to thirty string harp was tuned to diatonic scale.

An instrument which achieved wide success after its introduction to western Europe shortly before the fourteenth century and then remained the one most popular for secular music through several centuries later, was the lute, in both the long-necked and short-necked forms. The typical instrument had a pear or almond-shaped body reinforced with ribs. Fine, straight-grained wood was considered best for the belly which was reinforced with six small transverse wood bars. The instrument, made of thin wood was very light and fragile. Very few old instruments are still in existence.

The early lute had only four strings. Double strings or courses were introduced in the fourteenth century. During the next two centuries, first a high treble string and then a sixth course on the bass side were added. Later the instrument was enlarged further by addition of three to six additional bass courses with the lower double strings tuned an octave apart, the upper in unison. The theorbo and chitaronne were large longer lutes with lower range, some with bass strings over five feet long.

The period of greatest popularity for the lute was 1590-1630. It was used in

solo performance, vocal accompaniment, and in ensemble where it was one of the few instruments which could provide strong bass tones. It could play transcriptions with all parts from instrumental or vocal scores the same as done later with keyboard instruments.

Introduction Of Keyboard Stringed Instruments

ccording to the music historian Sybil Marcuse, the development of a new process for drawing instead of forging to produce wire suitable for musical instruments, made possible the introduction of the first keyboard struck - or plucked string instruments in the latter half of the fourteenth century. French documents beginning with one as early as 1360 refer to the eschequier, an instrument used through the fifteenth century before becoming extinct in the sixteenth. There are some indications it originated in England, the name translated in English is chekker. Later references describe it as "resembling an organ but sounded by strings". It appears to have been a small upright instrument with striking or plucking action, about the size of a portative organ. More specific details have never been discovered.

Another extinct instrument which is an even greater mystery is the dulce melos, mentioned only by several writers of the mid-fifteenth century. It was described as rectangular, with a clavichord-type action, and strung with twelve pairs of strings each divided into three segments in the ratio 1:2:4 struck by thirty-five keys. A 1503 inventory of Queen Isabella lists "a keyboard-type dulce melos".

The date of the first application of the keyboard to the polychord "monochord" to give the clavichord is uncertain because of ambiguous use of instrument names in early historical references, but historians believe the new instrument appeared near the end of the fourteenth century. The early clavichord was extremely simple. Its strings were uniform in length and tuned to the same pitch. The keys were simple levers perpendicular to the strings and were mounted on a center rail. Depressing the key raised a metal wedge, or tangent on the other side to stop the sting. The speaking length was

the segment between the tangent and the bridge on the right. In the fretted clavichord, the earliest type, each string or pair if double strung, was used for several keys. The left segments of the strings were threaded with a strip of felt to prevent their vibration.

Harpsichords originated soon afterward, if not at the same time as clavichords. The harpsichord appears to have been derived from the adaptation of the keyboard to the psaltery, a medieval trapezoid, harp, or wingshaped plucked zither descended from the harps of earlier civilizations. Harpsichord keys have an upright jack with a plectrum in a pivoted tongue mounted at the rear end. When the key is depressed the plectrum plucks the string as the jack moves up. When the key is released, the pivoted tongue drops to a non-playing position, and barely touches the string with no audible sound as the jack descends. In contrast to feeble clavichord tone, harpsichord tone is loud, clear and precise, especially suited for polyphonic texture or for chordal background.

The earliest reference with specific identification of the clavichord and harpsichord by name is a 1404 poem written in Latin concerning the use of these instruments by Minnesingers. Clavicordium was a combination of the Latin words for keys and strings, clavicymbolum was an early name of the harpsichord derived from Latin words for keys and dulcimer or psaltery. There are representations of clavichords and harpsichords in several works of art from earlier in the fifteenth century but the most detailed early source of information on their design is a 1440 treatise on musical instruments by Henri Arnaolut of Zwolle. astronomer at the Burdundian courts. The drawings in this work are among the first which show the present keyboard with accidentals in twos and threes - evidence that the keyboard reached its present form only just before these instruments originated.

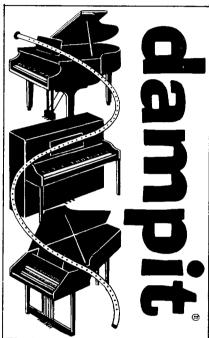
While the clavichord and harp-sichord became more common through the fifteenth century, the chekker continued in popularity but it faded from use and finally disappeared early in the next century. The clavichord was enlarged and improved by a more effective soundboard and a change from unison strings of equal length to strings of graduated length and gauge and tuned to different pitches with separate keys for each string. The classic shape

Continued on page 25

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Paul Monroe RTT Orange County Chapter

A FINE INSTRUMENT

his article is usually directed to the beginning tuner, however, this particular article is directed to everyone from the beginner through the craftsman. It is a story of what a good craftsman can do when there is a need.

First of all I want to set the stage so you will have an appreciation for what a technician did and why. The year was about 1947, maybe 1949. The big war had just ended. Materials were short. Piano manufacturing was at a low rate of production. This city was El Paso, Texas.

A father had a desire to purchase a new piano for his young daughter so she could enjoy and benefit from the discipline that results from taking piano

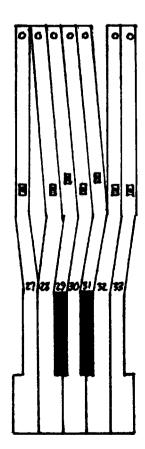
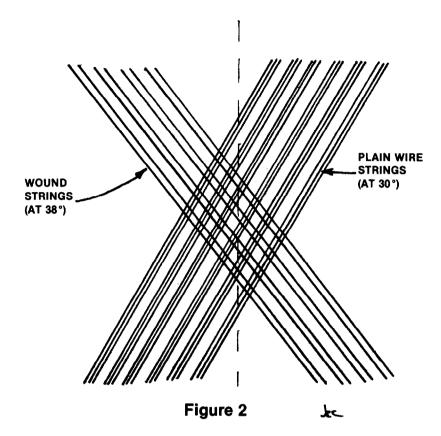


Figure 1



lessons and practicing. He went to a local piano store where he was persuaded to wait for a new piano that was on order. The dealer was sure he would like it.

The scene changes from 1949 to 1982 where I had the privilege of tuning this piano. Before I tell you about it, let me say that the craftsmanship in the work on this piano was top drawer. Whoever did the work was creative, a master craftsman, a genius in our field.

The case for this piano was originally a player piano case. It had been modified to about a 42 inch console. Without a thorough investigation you would never know it wasn't from a standard production line.

The toe blocks had been removed and where they were cut from the case, expert cabinet work had been performed in concealing the fact it had been done. Early American legs had been purchased and attached to the keybed.

The bottom panel (kick panel) was

from a player as the sliding panels for the foot pump were still intact. They had been covered by a fabricated music lyre that had been glued to the panel, brass pedal rods and all. It still looks great.

The action was from an old plano. I would never have known this if I had never worked on player actions before. The front part of the whippen that would normally be activated by the stack of the player mechanism had been cut off. The saw marks are still visible.

The abstracts (stickers) had been removed and capstan felt cloth placed on the bottom of the whippen. The hammer butts, shanks and hammers had been replaced. I noted that the hammer line was consistent, however, the strike point in the last octave went astray. That is to say the volume of the tone reduced in the last octave.

The action bolts had been bent to fit. In two cases they had two bends to accommodate the action brackets.

The damper flanges were plastic. The damper lever cloth extended ¼" beyond the damper lever. The spoons had been bent to fit each lever as required. Sort of makes you think that maybe the damper flanges were from another piano also.

The keys were from another piano. I assume this to be so as the break for the keys is at 28 and the break for the action is at 32. The balance rail pins had been moved over to accommodate. See **Figure 1**. This was the same situation at the tenor-treble break. The action break is at 44 and the key break is at 51. Here again the balance rail pins had been moved.

The plate was from an Adolf Klein piano. (The fall board had an Adolph Klein decal.) The bottom of the plate is located 3 inches above the bottom board.

The angle of the plain strings is consistent from the bass-tenor break through note 88. The angle on note 88 is the same as the first note after the bass-tenor break. It never changed. It didn't fan out as we usually see in most pianos. See **Figure 2** for a schematic of the angles.

The back posts had been cut down and were placed in between the top beam and the bottom beam. They were not morticed in as usually found in most pianos.

The only reason I discovered this unique creation was because I had to reglue two jack flanges and replace one whippen flange. This aroused my curiosity as I had been informed that the piano was new in 1949.

The pitch was only 5HZ low. Not bad in my opinion for the length of time be-

tween tunings.

I do not know the name of the store where this piano was purchased nor do I know the name of the technician. One thing I do know is that at that time, the spinet was coming into its own (with plastic elbows) and demands for pianos on the increase, we had in our midst a fine craftsman who took what he had to work with and created a fine instrument that is still enjoyed to this day. Whoever your are, congratulations.

Sound Background Continued

of the later clavichord was an oblong case about three to four feet long by two feet wide.

The harpsichord developed into several different forms. The smaller instruments for domestic use included the spinet — usually in a triangular or pentagonal case, and the virginal — usually in a rectangular or polygonal case. The clavicy-therium was an upright harpsichord. The larger harpsichords became magnificent instruments with wing-shaped cases six to eight feet in length, two keyboards — each with about five octaves, and three or four sets of strings varying in pitch range and tone quality.

Although it was touch-sensitive to some degree, the feeble tone of the clavichord limited its use. It served as a practice instrument for organists and other musicians, singers, teachers, and composers. It was most popular in Germany. The lute dominated secular

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music during the early and midsixteenth century while the harpsichord was used primarily for background to other instruments and voice. Later during this period, rivalry developed between professional musicians with the harpsichordists finally victors over the lutenists after the capabilities of the harpsichord were realized by the musical world. The harpsichord rose not only to play a more important part in ensemble and orchestral music but to star in virtuoso performance as well. It retained its eminence until it was displaced by the concert grand piano in the last decades of the eighteenth century.

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Convention 1982

Piano Technicians Guild

25th
Silver
Anniversary
Convention
and
Technical
Institute

A CONTINUATION OF CONVENTION ARTICLES AND PHOTOGRAPHS WILL BE IN NEXT ISSUE

1982 CONVENTION OPENING NIGHT

Convention Photographers: Mark Anderson, RTT, Washington, D.C. Chapter Ankers Capitol Photographers, Washington, D.C.

t's just GREAT," "Good to be here," "So glad we came," "Wouldn't have missed it for the world"... were just some of the joyful and satisfied words overheard in the Capital Hilton in Washington, D.C. as the Piano Technicians Guild members celebrated twenty-five years of progress at its Silver Anniversary Convention Opening Ceremonies.

Attendees owe a great deal of gratitude to the members of the Washington, D.C. Chapter, and Ruth Ann Jordan, Chairman of the Host Committee, in particular, for a spectacular program. Long-time friendships were renewed, new friendships made right from the start. With the new name badges with huge print, it was easy to read names, even at a distance. This was a helpful innovation.



Audrey Eaton and Genevieve Travis assisting at the registration desk.

Everyone came with high expectations to see and hear what a Silver Anniversary opening ceremony would be like. Would it be different? Would it be something special this year? YES, it was and in many ways. The Senate and Congressional Hall was

ablaze with scarlet and gold colors. Chandeliers "dripping" with hundreds of crystals in each tiered globe and countless lights. Gold-framed mirrors lining the walls reflected the color, lights, and expectant people.

On a dais, Ruth Ann Jordan extended an enthusiastic welcome to everyone, in behalf of the Washington, D.C., host chapter. As the Chapter's famed Alpha Band played, the official Armed Forces Color Guard marched in with flags flying through the doubledoors. It was an impressive moment. All joined in singing the National Anthems. Many were very deeply touched and all were stirred by the ceremony.



Entry of the Color Guard



Colette Collier leading the assembly in the singing of anthems

When the Color Guard withdrew, Carlos Ralon, President of the Washington, D.C. Chapter, gave an invocation, followed by a memorial to those of our members who had passed away in the past year.

PARADE OF PAST PRESIDENTS

The Band played music especially written for the occasion as the two interim co-presidents of the Guild in 1957 were called to the dais by Carlos Ralon who announced, "Mr. President, please take the gavel." Errol Crowl and John Travis went up to the dais and jointly raised the large piano hammer gavel, acknowledged the applause, and called, "Mr. President, please take the gavel." Don Morton strode up amid his applause and again called up the president who followed his term of office. In turn, they responded, one at a time: Chuck Burbach, Wendell Eaton, Erwin Otto, Ralph Kingsbury, Jess Cunningham, George Morgan, "Kelly" Ward, and Bob Russell who passed the hammer to President Sid Stone.



Erroi Crowl and John Travis, Interim Co-Presidents 1957-1958



Chuck Burbach 1963-1965



Erwin Otto 1967-1968



George Morgan 1972-1973



Kelly Ward 1973-1975



Sid Stone, **President**

ROLL CALL AND INTRODUCTIONS

Charlie Huether, Secretary/Treasurer, called the roll of countries and states. Representatives responded loud and clear as their home area was named.

President Sid announced that our friend and vice president, Ernie Preuitt, was hospitalized and unable to join the group, to his very deep regret. Ernie sent greetings and good wishes. Get well wishes were sent from the group for a fast recovery.



The famous Alpha Band of the Washington D.C. Chapter

The members of the Guild Board of Directors were formally presented to well-earned applause and then Julie Berry, president of the Auxiliary, presented the Auxiliary's Board of Directors for their due recognition.

PROCLAMATION AND HALL OF FAME AWARDS

The official proclamation was read from the Mayor of Washington, D.C. then Dick Bittinger, Chairman, announced the winners of the 1982 Hall of Fame Awards: Cliff Geers and John Scheer. Ellen Sewell accepted the award for Cliff and John came forward for his presentation as both were received with loud cheers.



Ellen Sewell accepting the Hall of Fame Award for Cliff Geers. Award amid cheers.



John Scheer accepting his Hall of Fame

REPORT ON THE 1982 TECHNICAL INSTITUTE



Martha Lagoy, President **New Orleans Chapter**

Ithough the annual convening of the Council and the Board is of interest to all Piano Technicians Guild members — for it is then that business matters integral to the management of an international organization such as ours are decided — the real meat and potatoes of the Annual Piano Technicians Guild Convention, that aspect which technicians eagerly await and enthusiastically attend, is the Technical Institute. Under the direction of Wendell Eaton and his assistant, Joyce Meekins, the Institute offered a wonderful mixture of classes geared toward every technician, ranging from student to expert, and covering a variety of topics as diverse as muscular relaxation therapy and advanced scale design. Instructors included some of the best-known (and some not-so-well-known) names in the piano industry.

In addition to classes, the Technical Institute sponsored a display of exhibits by both individuals and institutions involved with the piano trade and with the Piano Technicians Guild. Serving a two-fold purpose, the Technical Exhibit enabled technicians to obtains information about and to become familiar with new products and instruments, and it made possible the dissemination of this information by manufacturers and vendors. In short, the Exhibit helped promote that spirit of communication and cooperation between manufacturers and technicians which is crucial to a flourishing piano industry in all its aspects: production, sales, and service.

Due to the sheer number of classes offered by the Technical Institute; 35, it was totally impossible for one technician to attend even a portion of each class, and therefore an eyewitness account of each course is out of the question. Below, however, is a series of first-hand reports on several of the seminars held during the 25th Piano Technicians Guild Technical Institute.

Despite its somewhat misleading title, Ben McKlveen's Weight Watchers' Class was not designed for aerobic dancers or macrobiotic dietary devotees, but rather for technicians desirous of learning about touch weight control in piano keyboards. An initial discussion of definitions (downweight, upweight, etc.), standards, and reasons for weighting of keyboards gave way to a slide presentation illustrating the key weighting procedures utilized in the Baldwin factory. There followed an explanation and demonstration of weighting techniques to be used by technicians in the field. Included in this portion of the class were reasons for weight change, preliminary preparations, procedures for weighting, and tools and supplies involved in the process. Of special interest was the application of weighting methods to vertical keyboards, as well as harpsichords and celestes. In total this was a very fine class, informative and entertaining, peppered with Ben's unusual analogies and similes which caused at least one observer to pause and ponder the images invoked.

As usual, the Yamaha class on **Grand Dampers** was clear, well-presented, and entertaining. Utilizing a variety of media — notes, lectures, slides, film — the course covered theory, installation, regulation, and troubleshooting of the grand damper action. The opportunity for hands-on experience by class participants was available, and a question-and-answer session was incorporated into the presentation.

As the title implies, Ernie Juhn's session on **Vertical Troubleshooting** dealt with problems present in vertical pianos which do not fall within the scope of regular tuning and maintenance, such as squeaks, buzzes, rattles, etc. In addition to helping technicians to interpret the customer's complaint, to identify the offensive characteristic, and to remedy what ails the instrument, he also passed along several hints concerning business sense in dealing with clients. Near the conclusion of the class, as lagniappe, he offered an explanation of why apparently "healthy" pianos go out of tune in accordance with humidity fluctuations, and he treated participants to an exhibition of spoon-bending outside the piano.

Once again Fred Drasche attempted to demystify the complexities of the Steinway sostenuto in his class on **Pedals, Lyre, and Sostenuto**. Composed of two major segments, the presentation stressed proper adjustment of the pedal and lyre assembly and an effective method of regulating the sostenuto. Fred worked with small groups of technicians while going

through the step-by-step process, and a limited amount of hands-on experience was possible for some lucky individuals. Class ended with a guarantee from Fred that if technicians used his methods, they would never again encounter problems with Steinway sostenutos.

The main focus of the Kawai class, **Care and Feeding of Tools**, led by Jim Harvey, was planning the technician's basic array of service tools and obtaining maximum usage from a minimum number of tools. However, in addition to the informative discourse on the tangibles of our trade, Jim also advised technicians on some of the intangible — but no less important — aspects of piano technology, namely, customer relations. Many practical tips on dealing fairly and wisely with clients and on improving one's association with particular piano owners as well as the general public were recommened.

Gadgets, Tools, and Ideas by Bill Pealer and Errol Floyd was offered only twice during the Institute, and both sessions played to standing-room-only crowds. Described as a man with a wealth of knowledge in many areas, Bill Pealer fascinated class members with devices such as home-made hammer boring jigs and a quick and easy tool for locating a hammer's strike point, and among other intriguing ideas, he suggested a variety of methods for adapting soundboard shimming tools. The only complaint heard concerning this class was that it was presented too few times.

Willis and Dave Snyder's class on **Shop Business and Operation** covered the basic information necessary to the technician who plans to open his/her own shop. Economic feasibility was constantly stressed, and size of shop, basic equipment, shop layout, and organization of work were among the topics mentioned. The class was a valuable contribution to the Technical Institute because it emphasized an approach to shop management that would enable the technician to turn a reasonable profit without the continual obligation to work long unreasonable overtime hours.

In his presentation of **Installation of Upright Hammer, Shanks, and Butts,** Bill Brandom, Service Manager for Everett, provided a well-organized systematic approach to removal and replacement of hammers, shanks, and butts in verticals as outlined in the Everett handout sheets. Great emphasis was placed upon the practical time and money-saving considerations in the decision of the technician to replace action parts rather than rebuild them. Slides were utilized to guide class members through the factory procedures of replacing butts, determining strike point, gluing hammers to shanks, and fitting and gluing shanks to butts in the piano. A vertical piano with cut-away portions of an action was available for demonstration, and participants were able to examine a caul used during the process of trimming shanks to length prior to installation.

Jim Coleman's class on Tone Regulation, while geared toward technicians who already possessed some familiarity with voicing techniques, contained material valuable to the neophyte as well as the veteran. Commencing with a lecture and slide presentation on hammer manufacture, the class continued with a description of various kinds of "tone robbers" and an explanation of preparatory steps necessary prior to any attempt at voicing (such as action regulated, hammers aligned and traveled, unisons tuned solidly, etc.). The second half of the presentation contained "A Logical Approach to Needling Hammers" and included a live needling demonstration on a Steinway grand by Jim. Some substitute hammers had been planted for obvious illustrative purposes, but some exceedingly delicate voicing techniques were carried out on a few of the instrument's original hammers in order to show the extremely subtle timbral distinctions which can be achieved at the hands of the skilled tone regulator.

Opening with Eric Johnson's explanation of why regulation is

necessary and why pianos go out of regulation, the Kimball class on Grand Regulation offered a clear and comprehensive quide to achieving responsiveness and evenness of touch in grand pianos. Roger Weinsensteiner led class members through preliminary inspection steps and initial preparations before the actual regulation, such as bedding the keyframe, easing keys, etc. Ray Reuter then assumed the rule of instructor; he introduced the four different types of whippens currently used in Kimball, Bosendorfer, and Conn pianos (the Pratt Read U7, the Pratt Read Clemson, the Herrburger Brooks Schwander type, and the Hertz Spring Renner), and he then demonstrated the process of grand regulation with the aid of slides and overhead transparencies. Action models and tools were available to class participants for hands-on experience. The presentation concluded with an all-too-brief discussion by Eric Johnson of the concept of aftertouch and its significance in grand regulation.

Willis and Dave Snyder's class on Grand Hammer Installation was comprised of two sections; the first half contained a slide presentation and lecture, while in the second half, pairs of students were given the opportunity to hang a set of six new hammers utilizing techniques learned during the first half. Included in the slide-lecture portion were explanations and illustrations of hammer manufacture, filing, spacing, alignment, traveling, boring, hanging, and finishing. During the hands-on segment, the work of each pair of students was carefully scrutinized by Willis and Dave, and practical criticisms, as well as occasional compliments, were offered where appropriate by the instructors. If fault was to be found with the seminar, it could only be that there was not enough time to cover all the material outlined in the handout sheet. A more in-depth demonstration of the process of hammer boring would have been desirable, but perhaps in the future a separate class devoted exclusively to this topic would be preferable.

Wally Brooks' class on Pinblock Installation was so popular that for each session the classroom was filled to overflowing; in fact, he scheduled an additional Thursday morning presentation in order to admit as many students as possible. The popularity of the class was well deserved. In a mere hour and a half, by means of slides, models, and drawings, Wally demonstrated his procedures for replacing a fully fitted Steinway pinblock: marking plate and block, pulling the plate, removing the block, and cutting, fitting, and drilling the new block. Wally explained his preference for fully fitted blocks, citing increased tone production and stability among his reasons. The absolute necessity of the pinblock's being "mated" to the plate was continually stressed. Wally discussed the four types of pinblock material which he recommends, making class participants aware of the desirability of altering one's usual woodworking techniques in order to accommodate the individual properties of the various materials. It was made abundantly clear that the entire pinblock replacement process could be readily accomplished by a single technician in his or her own shop. The outline sheet which every class member received was quite thorough in detailing the entire process, providing technicians with a useful reference source for future pinblock jobs which come through their shops.

Setting the Bearing was the topic of conversation in the Baldwin class taught by Jack Krefting and Willard Sims. The concepts of down bearing, side bearing, and front and back bearing were explained and their purposes and effects described. With the aid of slides and diagrams, various plate support systems and their respective merits and/or weaknesses were

discussed. In addition to general bearing information applicable to most any grand piano, the course focused on the relatively new Baldwin plate suspension system and Acu-just hitchpin arrangement. Class members participated in the installation of a plate in a Baldwin model "M", the adjustment of plate bearing by means of the full-thread plate bolts and tapped plate holes, and the setting of bearing on several notes. Students were provided the opportunity of working with the Baldwin bubble gauge designed expressly for use with Acu-just hitchpins. Technicians were instructed in procedures used at the factory and were advised on adaptation of these procedures for use in the field. Piano Technician Guild members have grown accustomed to interesting and informative presentations by the Sims/Krefting team, and this seminar was no exception.

It is unfortunate that time and space will not allow a description on all classes, but a quick reference to the Institute Program listed in previous Journal copies will give you a rundown of these classes.

This year's Exhibit quarters were cramped, but in spite of the physical limitations, the exhibits steadily lured Convention participants to come and browse, inspect, sample, and, hopefully, purchase tools, books, supplies, and of course, pianos. Piano manufacturers represented included Aeolian, Baldwin, Currier, Everett, Kawai, Kimball, Lowery, Meer, Steinway, Walter, Wurlitzer, Yamaha, and Young Chang. Of particular interest among the manfuacturers' displays were Baldwin (with a cut-away model of a Baldwin grand), Currier (with a model of the back of the "New Technology" vertical piano), Meer (with pianos manufactured in the People's Republic of China), and Kimball (with one of the Viennese edition grands). Manufacturers of tools, parts, and supplies for the industry who participated in the Exhibit included American Piano Supply Co., Dampits, Inc., Dampp-Chaser, Inc., Inventronics, Inc., John Travis Publications, Oliag AG, Pacific Piano Supply, Inc., Pianos by Dante, Inc., Wally Brooks, Piano Shoppe, Inc., and Sciortino Instacoiler. The only school to take part in the Exhibit was the Perkins School of Piano Tuning and Technology. This year, as in 1980, the Cassette Recording Co., of Columbus, Ohio, offered for sale taped cassette recordings of the classes presented in the 1982 Technical Institute. Representatives from the Cassette Recording Co., reported that sales of tapes for all classes were quite steady; however, it was hinted that among the more popular cassettes were Chris Robinson's Progressive Grand Regulation, the Snyders' Shop Business and Operation, and Steve Fairchild's New Adventures in Fine Tuning. (For information concerning the availability of cassettes, contact the Home Office.)

In addition to the above-mentioned classes, Exhibits, and meetings, the Technical Institute offered tuning examinations and the opportunity for those technicians who had passed with scores of 90% or above to be trained as Certified Tuning Examiners. A new Tuning Exam Committee, headed by Chris Robinson, was also appointed.

While compliments abounded concerning the Technical Institute, there were mixed feelings about the one-hour class breaks in order to allow more time during the day for examination of the Exhibit display booths. Although many technicians were appreciative of the gesture, most felt that the sixty minute recesses proved detrimental to the continuity of the longer two-period classes. However, all in all, the 1982 Institute Director, Wendell Eaton, and his capable assistant, Joyce Meekins, are to be heartily congratulated for a job well done. In conclusion, it can be truly stated that, from the overanxious beginner to the most jaded technical palate, the 1982 Technical Institute contained "something for everyone".

See y'all in New Orleans next year!

1981-1982

Membership Booster Club



MEMBERSHIP IS EVERYBODY'S BUSINESS

ne important reason for belonging to an organization like the Piano Technicians Guild is fellowship and the friends one makes. This is not usually considered when discussing reasons for belonging. It is not always considered when prospective members show up at a meeting.

Every chapter should be prepared when prospective members come to meetings. Guests should be treated as guests would under other social situations... made welcome. Just as we all strive to make a good first impression on a new customer, so too should we make our chapter guests, usually prospective members welcome.

Does your chapter have a "Guest Book"? A special register for guests to sign when they visit? This is a special touch which helps make a visitor feel important and welcome.

Does your chapter make sure that strangers do not sit alone, flounder around on the fringe of social conversation hoping someone will notice them?

Does your chapter actually have someone assigned the task of making sure that visitors are introduced and made to feel welcome?

If your chapter does all of the above, it is well on the way to being a growing

chapter and a force in the local scene.
BUT THAT ISN'T ALL.....

Does your chapter have an organized system for processing applications so that a newcomer applying for membership at the height of his enthusiams is not left dangling for months while you are getting your test act together?

Testing is something which takes a lot of time and effort, on the chapter's part and the applicant's. It is reasonable that a test can't be set up on someone's whim. But if there are regular testing periods throughout the year which everyone knows about, it is a simple thing to assign the applicant the future date. When the time and date are set, a wait isn't so bad. Indefinite waits are what discourage.

Remember, it is one thing to talk about bringing in new prospects, but all the effort and time doing that can be wasted if the prospects aren't treated as if they are welcome and the applications handled and processed as if they are important. Nothing cools ardor more than indifference. Make sure your chapter is not indifferent to applicants and potential members. They are our lifeblood. They are our leaders for tomorrow.

Booster Club	Pts. Mbrs.	BALIGIAN, Agnooni4 1
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EVANS, George	
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FELTON, Hilbert	
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BROWNFIELD, Gary	19	4
SMIT, Robert	18	4
LOEWEN, Joel	15	3
ROBY, Thomas	15	3

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MIZELL, Wade
NEIE, Gary
OUSLEY, Robert
RALON, Carlos
PERKINS, Robert
WOLF, Robert

HIGH SCORES IN THE BOOSTER CLUB

WALKUP, Kenneth	14	3
MARCIANO, William	13	3
CRABB, Larry	12	8
CUNNINGHAM, Jess	11	3
LAGOY, Martha	11	3
BRANDOM, William	10	2
CONNOR, John	10	2
FELTON, Hilbert	8	5
JESCHKE, Alfred	10	2
OLIVER, Stanley	10	4
PREUITT, Ernest	10	2
ESMONDE-WHITE, Oliver	9	2
McKLVEEN, Ben	9	5
HUNT, Newton	8	2
KOKTAN, Paul	8	2
TREMPER, Fred	8	2
WAGNER, Lloyd	8	2
FINGER, Chris	8	2
RODES, James	8	2
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SIEROTA, Walter	7	3

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Editor, Auxiliary Exchange

JULIE BERRY

6520 Parker Lane Indianapolis, IN 46220

President's Message

hank you for re-electing me to the office of president of the Piano Technicians Guild Auxiliary. I look forward with pleasure to another year of meeting many of you at regional seminars and spending time with many more of you at our next national convention in New Orelans.

If you have ideas about the Auxiliary or suggestions for new programs and projects, I hope you will contact me during the year. The Auxiliary's Executive Board is very interested in keeping in touch with the membership throughout the year; I think you will find us to be receptive to your thoughts and ideas.

Sincerely, Julie Berry

CONVENTION HIGHLIGHTS

I am still riding on high spirits from the Silver Anniversary Convention. We arrived home yesterday, so my impressions of the week just past are still very much with me. It was a magnificent celebration — from the awesome precision of the military colorguard at the opening assembly to the gentle barbershop harmonies of Larry Crabbs' at the closing luncheon. In this month's column we will highlight some of the activities. Next month we will present the secretary's report of the Auxiliary's business meetings.

Fireworks on the Fourth

Before the convention actually got underway many people had already arrived in Washington for the Council meeting or just to be in the Nation's Capitol on Independence Day. On the evening of July 4th, three busloads of technicians and their families left the hotel on a tour of the city which included a stop at the steps of the Jefferson Memorial so we could have choice seats for the dazzling fireworks which were launched near the Washington Monument. (One young person near us observed that Thomas Jefferson had a good view of the fireworks from his monument; then not wanting to appear ignorant, the child added, "And he is also dead.")

Opening Session

It is difficult to picture funeral directors or junior bankers gathering for a stirring opening assembly as the piano technicians do, but perhaps they also get wrapped up in the excitement and anticipation of their own conventions. At any rate, there is always a special exhilaration at opening assemblies of the Piano Technicians Guild Conventions, and special feelings were certainly in the air at the Monday evening Opening Assembly of the Silver Anniversary Convention. There were sobering moments as Carlos Ralon read the list of members who had died since the last convention, stirring moments as we joined in singing the American and the Canadian national anthems, and heartwarming moments as each of the past presidents of the Guild received an engraved silver box commemorating his role in the first twenty-five years of the Piano Technicians Guild. At the close of the assembly the exhibits were opened and everyone had a chance to look at the displays and to exchange greetings with friends from around the country.

Double Decker Excursion

Just before nine a.m. on Tuesday, a sleek black double decker bus pulled up to the curb beside the Capital Hilton. Over 70 piano people climbed aboard, eager to view the city from the unique British-style bus. A few moments later a second double decker arrived for the rest of group, and soon the buses were on their way to the White House ticket area. (The White House is such a popular tourist attraction that one must secure tickets early

in the morning for reserved times later in the day.)

All day Tuesday the double deckers escorted us around the city, complete with well-trained guides to tell us about the things before our eyes. We toured the Capitol Building and sat in the legislative chambers. We lunched at the Smithsonian, and strolled through Arlington Cemetery in the afternoon. A person could not help but be impressed by the majesty and the dignity of America's capitol city and by the historic importance of the places we were visiting.

Silver Anniversary Reception

Wednesday afternoon the Cameron String Quartet assembled in the South American Room. A giant piano cake was wheeled into the room, and people streamed in through the doors to fill the room with lively conversation and friendly greetings. It was a time for us to sit down together and enjoy each other's company, a time to listen to Agnes Huether remind us of things that were in vogue twenty-five years ago when the Guild first began: the hit songs, the favorite teams, the popular movies. The Cameron String Quartet entertained with a well varied musical program which highlighted a pleasant and relaxing afternoon.

The Banquet

Wednesday evening found us convening in the Presidential Ballroom for the annual convention banquet, always a not-to-be-missed event. This year's entertainment was an excellent performance on two perfectly matched Bosendorfers by duo-pianists Steven and Nadya Gordon. When the audience rose to its feet, calling for an encore, the Gordons returned to the stage to play Ravel's "Bolero" with such precision and artistry that even the piano technicians were amazed at the sounds the Gordon's brought out of their pianos.

Meeting the Exhibitors

Thursday morning the Auxiliary was treated to brief vignettes of the exhibitors and suppliers who participated in the convention. They came to the South American Room one at a time, to be introduced and to talk a few minutes about the companies they represented. We learned of familyowned businesses that began in the middle of the living room floor and of multi-national corporations which pro-

duce pianos as one small part of their total operation. The exhibits became more meaningful as we were able to place a person with a company and as we learned a little more about the company behind the display.

Installation Luncheon

Thursday afternoon the response to the Auxiliary luncheon was super; every seat in the room was filled. Sarah Lampiasi installed the new officers with the art of a maestro, involving everyone in the ceremony along the way. Sid Stone, President of the Piano Technicians Guild, was a guest speaker. Deanna Grove provided piano music for a festive yet soothing background for the luncheon. After lunch Ron Berry stopped by to offer a few love songs to the Auxiliary he appreciates so much, and Ginny Russell accompanied on the piano. The afternoon was topped off by the incomparable and thoroughly enjoyable debut of the "Key Notes," the Auxiliary's own chorus, under the direction of Belva Flegle with Ginny Russell at the piano.

Sylvia Symington

Friday morning our special quest speaker, Sylvia Symington, spoke to us about her experiences living in Washington, D.C., and being involved in government life. She drew many parallels between her work with her husband when he was Chief of Protocol and when he was a Congressman to the work of our Auxiliary members with their piano technicians. She also delighted us with inside accounts and anecdotes connected with visits from foreign chiefs of state, ambassadors. and other dignitaries. It complemented our week in Washington to hear Mrs. Symington speak of life in the nation's capitol, and we all felt we understood Washington a little better through our comments and remarks.

Closing Luncheon

All too quickly the convention had drawn to an end. It was time to start saying goodbye, and yet we were still just picking up on old friendships and just developing some new ones. Larry Crabbs' barbershop singers beckoned us to think ahead to New Orleans in '83. The lunch was soon over, the last speeches made, and several of us were hurrying off to the Smithsonian for the lecture on early stringed keyboard instruments. The booths

were all taken down, the registration tables had been dismantled. The hotel staff was already busy planning for the next group. It always seem a little sad when another convention comes to a close, but that is only because we cherish the good times which have come before. Like birds which leave the feeder when the seed is gone, we have all taken our knowledge and emotional nourishment and flown off to our various homes feeling revitalized and better equipped to face whatever lies ahead.

It was a fine convention, as they always are. There were some friendly faces missing from the crowd — the Preuitts, Don Santy, and others who were prevented from attending by circumstances beyond their control. There were also several newcomers who were trying to absorb everything at once. We hope that you enjoyed your trip to Washington and your part in the Silver Anniversary convention. If you were not able to join us in '82, we hope you will be in the midst of the assembly when the current rises on the next annual convention.

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CONSUMER GUIDE TO PIANOS. I am conducting an extensive survey of new pianos: their quality, service problems, business practices, etc. The results will be published next by a major publisher. If you regularly service or sell new or near-new pianos, work in a piano factory, or otherwise have information, expertise, or opinions which you would be willing to share, please send your name, address, and phone number and I will contact you. All sources will be kept confidential. Larry Fine, Piano Technician, P.O. Box 465, Jamaica Plain, MA 02130.

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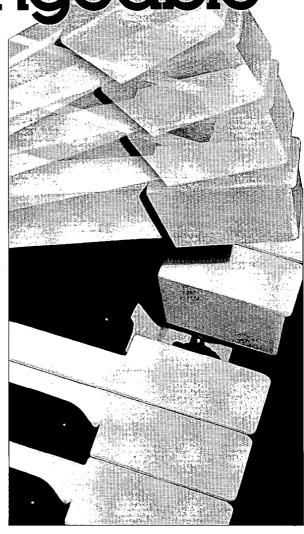
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Piano Technicians Journal *UPDATE*

September 1982

RESUME OF THE ACTION BY DELEGATES IN COUNCIL SESSION, 1982

This is a condensed report of all of the important action by the delegates at the Council session held in Washington, D.C., July 4 and 5, 1982.

NEW CHAPTERS Six new chapters were granted charters and all who worked to assist in the formation of the new chapters were congratulated.

WAUKGAN, ILLINOIS	#600	Central East Region
PRESCOTT, ARIZONA	#863	
RESEARCH TRIANGLE, NORTH CAROLINA	#275	Southeast Region
BOULDER, COLORADO	#806	Central West Region
SAN FRANCISCO EAST BAY, CALIFORNIA	#945	Western Region
COMMONWEALTH, BOSTON	#022	Northeast Region

CHAPTER CHARTERS LIFTED The charters of two chapters were lifted due to lack of members.

NORFOLK, VIRGINIA	#235	Southeast Region
MIRACLE STRIP, FLORIDA	#324	Southeast Region

CHAPTER NAME CHANGE: Columbia, SC to Palmetto, Florence, SC

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

CHAPTER SUSTAINING MEMBERSHIPS were reported approved by the board of directors;

MILES FARSTER	Hampton, VA	Southeast Region
DAVID BLACKLOCK	Northeast Florida	Southeast Region

BUDGET The budget was adopted as printed.

EMERGENCY AMENDMENT The board of directors reported a proposed amendment to the bylaws which had inadvertantly been omitted in the committeereport and was therefore recommended taken up under the emergency provision for bylaws amendment. The Council voted unanimously to consider the emergency proposal which was a request by the Montana Chapter to be transferred from the Central West Region into the Western Region for reasons of greater ease and opportunity for participation in local Guild meetings and events. The request was approved unanimously.

AMENDMENTS TO THE PIANO TECHNICIANS BYLAWS AND REGULATIONS Action by the delegates was taken on all of the proposed amendments listed in the official Council Agenda Books:

- 1. **INTERNATIONAL ASSOCIATION OF PIANO BUILDERS AND TECHNICIANS** The Council adopted a resolution "That the Guild shall be a member of the International Association of Piano Builders and Technicians".
- VISUALLY HANDICAPPED CERTIFIED TUNING EXAMINERS Regulations Article IV g) 2) deleted and the following was substituted:

[&]quot;Successfully complete instructions in procedures used during the test, use of qualifying measuring equipment and performance of required calculations, except that visually handicapped persons need not perform those aspects of instrument use which require eyesight."

- 3. **COMBINING "CHAPTER MANAGEMENT" AND "CHAPTER ACHIEVEMENT" COMMITTES**Regulations Article 1, Section B 4) and 5) were deleted and the following substituted:
 - "4) Chapter Management and Achievement Committee. There shall be a Chapter Management and Achievement Committee which shall function to develop programs whereby chapter officers can develop management skills and participate in interchange of chapter management ideas. A chapter achievement award shall be given for categories of chapter size annually. This award shall be part of the program of the committee to promote chapter activity and vitality."

The remaining items in the list of committees were renumbered. Regulations Article III, Section A Awards; the following was added:

- "3) Chapter achievement awards shall be given each year by the Chapter Management and Achievement Committee, the awards to be developed by chapter size and to be graded for effort, success and merit of yearly activities."
- 4. DUES FOR ASSOCIATE AND AFFILIATE MEMBERS The proposed amendment to increase the annual dues of Affiliate Members to the same amount as for Registered Technicians was debated and amendments offered to change the amount to \$85.00 per year. The vote of the delegates defeated the amendment and therefore dues for Affiliate Members remains at half the amount of dues for Registered Technicians.
- 5. **DELEGATES AND ALTERNATES TO COUNCIL AS FRANCHISED MEMBERS** Article X, Section 3 add a new item b) as follows as adopted unanimously:
 - "Delegates and Alternates must be franchised members of the Guild."
- 6. **MEMBERSHIP FOR OLDER INACTIVE MEMBERS** There was considerable debate on both proposals and finally amendment #6A was adopted after being amended to read as follows:
 - "A member may continue membership and pay no annual Guild dues provided that the member:
 - 1. "Has a minimum of ten years continuous membership in the Guild and has reached the age of sixty-five.
 - 2. "Is no longer engaged in any form of piano work.
 - 3. "Agrees to pay the cost of the Guild death benefit insurance or consents to drop from the insurance program.
 - 4. "Agrees to pay a cost established by the board of directors for receiving the Piano Technicians Journal or consents to drop from the Journal mailing to members.
 - 5. "Have approval of the chapter. Members-at-Large must have approval of the Regional Vice President."
- 7. **CHANGE IN APPRENTICE PASSING GRADE** The proposal to raise the passing grade for Apprentice classification was referred back to the bylaws committee after much debate.
- 8. **ADVERTISING PROBLEMS** To clarify who can and who cannot use the Piano Technicians Guild logo, etc., and advertise membership in the Guild the following was adopted:

Article III, Section 2 Registered Technicians last sentence amended to read:

"Registered Technicians shall have the exclusive right to use the Piano Technicians Guild name, emblem, trademark and other similar devices and the exclusive right to use the following titles:" (No change in titles listed under a), b) c).)

Article III, Section 2 Associates last sentence deleted and the following substituted:

"Associate members may not publicly advertise their membership in the Piano Technicians Guild and may not use the Piano Technicians Guild's name, emblem, trademark and other similar devices."

Article III, Section 2 Allied Tradesmen second sentence deleted and the following substituted:

- "Allied Tradesmen members may not publicly advertise their membership in the Piano Technicians Guild and may not use the Piano Technicians Guild's name, emblem, trademark or other similar devices."
- 9. REVISION OF THE HALL OF FAME COMMITTEE The revised procedures for the Hall of Fame Committee were amended and then adopted as follows:
 - 12) Hall of Fame There shall be a Hall of Fame to honor those who have shared their talents, time and loyalty to our profession so that we may have what is ours today. Therefore, the Piano Technicians Guild has instituted this Hall of Fame record wherein names, with profiles and tributes to honored ones may be preserved and remembered.

- A) The Hall of Fame Committee shall be composed of no less than six Piano Technicians Guild members, one from each region and one Piano Technicians Guild member from the piano industry appointed by the President.
- B) If a chapter nominates a committee member to the Hall of Fame, the committee member must either resign from the committee or withdraw his nomination.
- C) Only chapters may nominate candidates for the Hall of Fame, and a resume of the candidate must accompany the chapter's choice of nomination.
- D) After committee chooses no more than two recipients, the chairman *may* request more information for the Hall of Fame Record Book (if needed, from other sources throughout the country other than the recipients chapter, or other nominating chapters).
- E) The Hall of Fame Committee shall complete its work by March 31st of each year. The person(s) so honored will be recognized at the following Annual Convention during the opening session.
- F) They shall be presented with a certificate suitable for framing and a lapel pin, if living and present. If the honoree(s) are not present, the award(s) shall be forwarded to the local chapter president who will bestow the honors in an appropriate manner.
- G) If the honoree is deceased, the award shall be made to a member of the family. (In this case, the certificate only would be adequate.) If the award to the deceased cannot be made at the convention, then the certificate shall be forwarded to the local chapter president nearest the recipient who will present the award in an appropriate manner.
- H) All persons elected to the Hall of Fame shall be additionally honored by having a picture, if available, and a short history outlining their contribution to the piano industry included in an honor roll to be displayed in a prominent position at each convention. After the convention the book will then be returned to the national office for safekeeping.
- I) Eligibility qualifications for a person to be considered for nomination to the Hall of Fame should include the following:
 - 1. Long-term dedication to the causes, ideals, and purposes of the Piano Technicians Guild.
 - 2. Outstanding personal and professional integrity to the point of being an inspiration to others.
 - 3. Outstanding contributor and implementor of ideas, programs, etc., resulting in a definite improvement and upgrading of the piano industry as a whole.
- J) Suggestions for nominations shall be solicited through a form in the monthly chapter mailings, with the chapter form completed and a resume of the nominee to be sent to the committee chairman, no later than December 31st.
- K) After convention send back resumes of unselected nominees shall be sent back to the chapter for them to update the resume and again submit the following year, if so desired.

10. REVIEW OF THE BYLAWS BY THE PIANO TECHNICIANS GUILD ATTORNEY FOR POSSIBLE VIOLATIONS, ETC., OF STATE AND FEDERAL FAIR TRADE LAWS, ETC.

a) Preamble first sentence the following was deleted:

"... and to most effectively promote the technical, economic and social interests of piano technicians ..."

Preamble first sentence the following inserted as a substitute:

"To effectively promote and improve the piano tuning and servicing industry generally."

- b) **Article IV, Section 1 c)** which proposed to delete specific provisions chapters may currently use to screen applicants for membership was referred back to the bylaws committee to ask for guidelines from the Guild attorney on how chapters can legally screen applicants for membership.
- c) Article VII a) concerning the Journal being open for subscription to nonmembers the delegates voted to add the words "and industry".
- d) **Regulations ArticleIIC 2** which proposed to delete the whole paragraph relevant to visual tuning and aural tuning and violations of professional ethics was referred back to the bylaws committee for further review with the Guild attorney.
- Codes 1 concerning comments and opinions on the work of fellow Piano Technicians Guild members was deleted.
- 3) Codes 4 concerning acceptance of a fee from a piano dealer or seller' the proposal to add "If such fee is taken, disclosure will be made to the customer unless such a fee is illegal under local law." or "If not illegal under local law and such fee is taken disclosure must be made to the customer" was defeated and both sentences were declared unsuitable by the delegates who voted to strike the proposal from the amendments to the codes.
- 4) Codes 4 concerning publicly condemning any brand of pianos as a whole was deleted.

5) **Codes 5** concerning advertising was amended by striking "... or not consonant with the dignity of the profession" so that Code 5 now reads:

"I will not advertise in a manner so as to convey information that is misleading."

6) Codes 6 was divided into two parts with the first sentence to remain under Codes #6 and the second to become a new Codes #7.

Codes remaining to be renumbered in sequence.

NOMINATIONS AND ELECTIONS The following Guild officers were nominated and elected:

President	Ernest S. Preuitt
Vice President	.Charles P. Huether
Treasurer-Secretary	.Ronald L. Berry

ERNIE PREUITT'S MESSAGE Following the elections a recorded message from the newly elected president was heard by the assembly. Ernie Preuitt was unable to be present due to surgery but taped thanks and greetings to the membership.

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

Northeast Region	. Robert Smit
Southeast Region	
South Central Region	
Central East Region	. Robert K. Perkins
Central West Region	. Richard A. Flegle, Sr.
Western Region	Daniel A. Evans

STANDING OVATIONS were given to the retiring officers, BOB RUSSELL and TOM BLANTON

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

Nominating Committee:

James Coleman, Sr., Chairman
Ernest Juhn
Bob Russell
Larry Crabb
Don Morton
Alternates:

Tom McNeil
Carlos Ralon
Robert Draine
Minorities Committees:

Ernest Juhn
Nolan Zeringue
Orville Braymer

PUBLIC RELATIONS AND BUSINESS PROMOTION COMMITTEES By unanimous consent the Council approved division of this committee into two creating a Public Relations Committee and a Business Promotion Committee.

MEMBERSHIP PINS On recommendation of the board of directions the subject of making available special membership pins to recognize 5-10-15-20 and 30 years of service and membership in the Guild was referred to the Home Office for a report on feasibility and cost to the Guild.

USE OF TERM C.T.E. By general consent the Council approved the fact that CTE and certified tuning examiner are not membership classifications and are to be eliminated from Piano Technicians Guild publications.

CONVENTION ARRANGEMENTS The Council assembly discussed arrangements for future Piano Technicians Guild conventions with many suggestions being aired. The Council then adopted the following motion:

"That the Convention Time and Place Committee be directed to select a college or university site for the 1986 and 1987 conventions."

STANDING OVATION AND THANKS was given to the retiring president SID STONE.

BOARDROOM REPORT TO THE MEMBERSHIP, JULY 1982

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:

BOARD PRIORITIES Officers reported on progress in each region on membership, chapter strength and activity. Regional Vice Presidents are to report on progress again next year.

TUNING EXAMINATION The Examination Committee is to be composed of at least six CTEs and six technician-rebuilders to be advisers to the committee.

CHAPTER SUSTAINING MEMBERSHIP Granted to Miles Farster, Hampton, VA Chapter; David Blacklock, Northwest Florida Chapter; George Miller, Denver CO Chapter.

NEW SEMINAR HANDBOOK The board approved a new Seminar Handbook compiled by the special committee with Chairman, Dick Bittinger, Bob Russell and Bob Smit.

JOURNAL IN BRAILLE The Library of Congress has made a proposal which has been accepted by the board, for production of the Piano Technicians Guild Journal in Braille for one year. Further information on this will be published in the *Update*.

PIANO TECHNICIANS GUILD SUPPLIES The items for sale through the Home Office were discussed and decision made on those which are available to registered technicians and the items which may be requested by other member classifications. The most recent Piano Technicians Guild Sales Order form shows this information.

HALL OF FAME SLIDE DISPLAY A new format for displaying the Hall of Fame winners on a slide show with sound track was demonstrated and approved for showing during the convention. A new large zip-closed portfolio display was also presented and accepted as the permanent record.

INTERNATIONAL ASSOCIATION OF PIANO BUILDERS AND TECHNICIANS LaRoy Edwards' resignation as the Piano Technicians Guild representative and co-president on the board of the IAPBT was accepted with regret and Fred Odenheimer was appointed to the position.

The International Relations committee's proposal for voluntary membership for support of IAPBT through "FRIENDS OF IAPBT".

NEW FILM "THE PIANO" Purchase of one copy of a new 16mm film produced in Canada was authorized as an addition to the Steven Jellen Memorial Library.

STEVEN JELLEN MEMORIAL FILM LIBRARY Because of slow return of these films by those who borrow them and the need to establish some means of ensuring return in good condition the board approved the following new policies:

- a) A deposit of \$50 is to be made with each request for a film. The deposit to be returned in full when the film is returned in good condition.
- b) A late fee is to be charged on all film rentals:

\$10 if overdue 30 days

\$25 if overdue 60 days

\$50 is overdue 90 days

COUNCIL CONCLAVE The board expressed strong support for the convention session for members and all board members were requested to attend.

TELEPHONE COMPANIES AND CALL CHARGES In an effort to help reduce administration expenses the home office was directed to investigate possible savings through various telephone companies such as MCI and SPRINT.

NEW MEMBERSHIP CARDS A new and improved membership card was approved and will be in use for the 1983 dues year. The new card will be of chrome covered stock and include the member number in addition to the present information.

BUSINESS AIDS PROGRAM A new program with slides and a sound track demonstrating the value and use of business aids available through the Piano Technicians Guild home office was approved and will be available as a part of the Steve Jellen Memorial Library for chapter use.

REGIONAL MEETINGS AT ANNUAL CONVENTIONS The board approved time being allotted during annual Piano Technicians Guild conventions for the members of each region to meet to exchange views and discussion.

BUDGET The budget was approved as written for presentation to the council.

COMMITTEE APPOINTMENTS The appointments for 1982-83 were approved.

AFFILIATE MEMBERSHIPS A special committee has been appointed to prepare a report on procedures for affiliate members with Bob Smit, chairman.

1983 MIDYEAR BOARD MEETING Will be held the weekend of January 15th at the site of the 1983 annual Piano Technicians Guild convention in New Orleans.

INSURANCE A full report on insurance available to members was given by Eloise Ross, insurance broker for the Guild.

ACTION MODELS These were directed to be made available for sale as is and were later sold at the convention for \$25.00 each.

BENCH TEST The examination committee was directed to present a new bench test ready for approval at the midyear board meeting.

CONVENTION ARRANGEMENTS The board discussed convention arrangements and reviewed impressions of the meeting with the exhibitors.

MAIL BALLOT ON NEW CTEs The board approved the use of a mail ballot for approval of new certified tuning examiners when necessary.

NEW CTEs The following members were formally approved as certified tuning examiners:

NAME **BAIRD, JOHN BALDASSIN, Rick BUNKER**, Mark **BURGETT**. Kirk CRABB, Larry Jr. **GROSSMAN**, Matthew **GULLEDGE**, Hugh **HEIKKINEN**, Dale **HELMER**, Joe **HESS. Marty HOCHERL**, William KIMBELL, Michael MAGEE, Paul **NOWARK, Timothy** NYE. Jonathan REEVES, Michael J. SCHOELLES, Paul SHERLOCK, Steven STONE, Patrick

WILKERSON, Asa

WILLIAMS, Kenneth

ADDRESS Decatur, IL Provo, UT Minneapolis, MN Grass Valley, CA Tucker, GA Memphis, TN Plymouth, MI Ann Arbor, MI New Orleans, LA Wichita, KS Altoona, PA Daly City, CA Sacramento, CA Syracuse, NY St. Paul. MN Orem, UT Midland, MI Santa Ana, CA Annapolis, MD Memphis, TN Syracuse, NY

CHAPTER Central, IL Utah Valley, UT Twin Cities, MN Sacramento Valley, CA Atlanta, GA Memphis, TN Detroit, MI Lansing, MI New Orleans, LA Wichita, KS Central, PA San Francisco, CA Sacramento Valley, CA Syracuse, NY Twin Cities, MN Utah Valley, UT Midland, MI Orange County, CA Baltimore, MD Memphis, TN Syracuse, NY



THE 1982 CONVENTION CHAPTER CONCLAVE

All members were invited to the 1982 Convention Chapter Conclave held immediately before the beginning of the Council session. For one hour and a half a crowd of enthusiastic members met to share ideas on chapter management, public relations, membership, examination procedures and seminars.

Here are some of the ideas and responses we heard:

Norm Neblett In testing applicants it is important to pre-test as this is helpful to the applicant as well as the chapter. We allow a full half-hour for pre-test in identifying piano parts. Noone takes a bench test until able to pass the pre-test.

Bob Smit Pennsylvania Chapter formed a committee to make a program for music teachers. They went to the Sohmer factory and took slides of making a piano and had a professional make the announcements as the slides were shown. This was followed by a question and answer session. There is hope that the program may be made available for Guild program use.

Dick Flegle What about small areas? Oklahoma Chapter covers the whole state. A chapter member responded that they hold workshops for piano teachers. Go to ladies' clubs and speak on the history of the piano. These ladies are interested in historical aspects. Yes, we have problems due to distance — it is 100-150 miles to get to a meeting. We have to make the meetings worthwhile.

Evan Tublitz I am from upstate New York, small and scattered areas. We rely on strong technicals, publicity to bring in people from outside as well as our members. There is good cameraderie but it is the fine technicals which form the backbone and bring the members in. If evening meetings are too difficult try a Saturday.

Another member from Alberta, Canada told of going to the local schools and giving classes on how a piano is put together and how it works. This is always of interest to children and students.

Charlie Huether It is evident that a good positive, strong meeting is what attracts our members and prospective members to the Guild.

Bob Smit Be enthusiastic about the Guild.

Marshall Hawkins Technical programs must be selected for the members. Some for advanced members, some for beginners. We must charge forward with confidence. The new members will turn out well as our senior members have through example and encouragement.

Larry Crabb Our chapter makes full use of the excellent technical films available from the home office. If you haven't been using them you have been missing a lot. We tie in the film with 50 questions on the subject and make a fine program that way.

Norm Neblett We have a ten minute technical appetizer. A different person does it each time and this way we can use more of our experienced technicians over a shorter period. Our vice president heads up the technicial institute for the chapter. We have a great newsletter shared by other local chapters. Each of

the chapters has one page every month to tell about programs. The newsletter covers the whole of Southern California so any member knows what is going on in the other chapters and is welcome to join in at any time. We contribute to the cost of the newsletter according to size of chapter. One thing that is important about visiting other chapters is you get to know the other members. Then too, we can exchange whole programs and one time technicians from other chapters will visit and give us their program and we do the same another time. We give no more than \$30 for expenses if the distance is less than 50 miles and \$50 if it is over. We figure it about pays for the gas and expenses. We also have a common roster which lists all Southern California members and it sells for only \$1.25. Then we send it to all our dealers so they know who the members are. Believe me, it really works!

John Ferris It helps to participate in community affairs. Gets you and the Guild known as being helpful.

Charlie Huether When a prospective member comes to your meetings be very welcoming. We have to look for new blood and the vigorous testing and processing will not scare them off if handled right. Most prefer to belong to a chapter where standards are high.

Tom Blanton We encourage school students. If ten or more attend our convention they have the same entry rate as members. This is an inducement to have them attend the convention. They don't have a lot of money yet we need to consider them.

Olan Atherton We had a telephone seminar. The local telephone company fixed it up. We watch a series of slides and Jack Krefting is watching the same slides and talking to us over the telephone. (No effort was made to sell Baldwin.) As the slides are shown the audience can ask questions and receive answers from Jack or whoever. You can invite the general public. It is a new and interesting way to go.

Walt Sierota We had a woman president in our Philadelphia chapter for the first time and got quite a spread in the newspaper over it. Good publicity is valuable. Use your local news whenever you can. Especially for something new like when an outside technician is coming in to present a program. Consider inviting nonmembers, too. More customers and more prospects!

Connie Chesebrough If shows like MTNA or NAMM are in your area don't miss them. Go to the state and local seminars whenever you can. Ben McKlveen and I gave one hour on care, maintenance, etc. and covered a booth and showed action models. Those who took the class came to the booth and asked questions.

Another member spoke about having half a morning class devoted to teachers showing them piano maintenance and repair. For a small fee the same teachers could then attend the rest of the session.

Someone else reminded everyone that regular meetings can be announced on radio free to nonprofit associations.

Dick Flegle And don't forget use publicity to announce upgrades. Pleases the member and keeps the public aware of your chapter and the Guild's work.

Dan Evans Let the news media know when you are going somewhere important. Like telling them you were leaving to at-

tend the 25th Anniversary of Piano Technicians Guild and to take in the topgrade technicals.

Wade Alexander Do something for people who don't get to seminars. Have inexpensive one-day seminars with an outside person instructing. Helps to get new members — and more dollars.

Ralph Kingsbury Attracting new members and prospects pays off too.

Dick Bittinger Have a chapter project not only to make dollars but to grow and generate more members. Helps educate the public and promote Piano Technicians Guild. Don't forget local dealers make for good relationships. And, yes, films help, as well. It takes an experienced man to make a technical from the Piano Technicians Guild Journal — but it can be well worth it.

Larry Crabb Allan Foote has resources for mailings — ask him.

Charlie Huether Good meetings are top priority. Make sure you can test potential members so you don't lose them through delay.

Marshall Hawkins Use the RVP's help. Maybe we should have a Chapter Conclave during the middle of the convention so as to attract more members from chapters besides those who are here as delegates and alternates?

Dick Flegle Thanks to all for sharing your ideas. Keep them coming.

Chapter Dues Collection By The Home Office

The official Chapter Dues Collection Request Forms have now been mailed to every chapter in the August regular Chapter meeting. PLEASE BE SURE that this form is completed and returned to the home office before October 15th.

The home office cannot accept responsibility for collecting chapter dues unless the Request Form is completed and returned on time. PLEASE NOTE that we must have a request in writing each year.

All requests received by October 15th will be entered into the computer. Those listed for the 1982 year will not automatically be included but must make a new request for the 1983 dues year.

1983 Hall of Fame Award

Chapters are invited to submit names and resumes, of nominees for the 1983 Hall of Fame Award. You must fill out the form sent to each President in the Chapter Mailing. Please include as complete a resume of your nominee as possible, such as: birthdate, when entered the piano trade, joined the Guild (and/or parent organization(s).) To be eligible for the Hall of Fame, a member must have demonostrated:

- Long-term dedication to the causes, ideals, and purposes of the Piano Technicians Guild.
- Outstanding personal and professional integrity to the point of being an inspiration to others.
- 3. Outstanding contributor and implementor of ideas, programs

Chapter Notes

The final meeting of the Suffolk Long Island Chapter for the 81-82 year met on June 15, 1982 at the new home of Terry Leonhardt. It was attended by seventeen members and three guests. It was a very important meeting as elections for the 1982-83 year took place. All the members were told well in advance the candidates that would appear on the ballot. The following members were elected to office:

President — Frank T. Avolese Vice President — David Tabatchnick Secretary — James Maguire Treasurer — John Wolf

We at the Suffolk Chapter offer congratulations and wish them success for the coming year!

During the business meeting a suggestion was made and followed by a discussion to have an open house at the October, 1982 meeting for the purpose of inviting all non-Piano Technicians Guild tuners in the area. This would be an informal get-together where we might get some ideas why these tuners shy away from joing the Piano Technicians Guild.

We gave special attention to the memory of our beloved friend and devoted member of the Piano Technicians Guild, Mr. Mario Sinisi. Mario, for the past ten years had been an officer. At his death in May, 1982, he was a treasurer. Not only was Mario known to all the members of our chapter, but he was known throughout Long Island. The Community where he lived had befriended him and honored him with a lengthy article in the newspaper. He will be missed by all.

Sam Schorr

etc., resulting in a definite improvement and upgrading of the piano industry as a whole.

If photo of a nominee can be made available for the Hall of Fame Record Book, please send with the resume.

Nomination and resume must be sent to: Dick Bittinger, Chairman, no later than December 31, 1982.