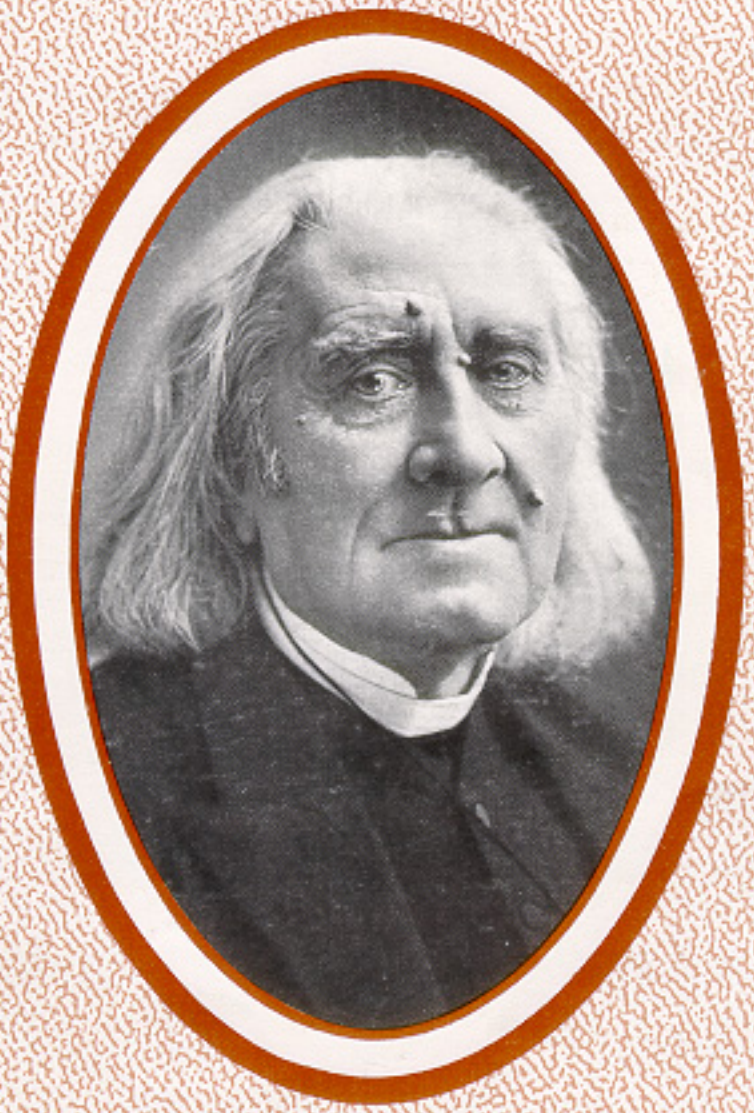
PIANO TECHNICIANS JOURNAL

April 1981



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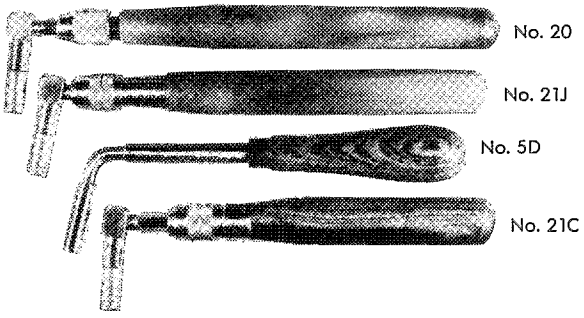

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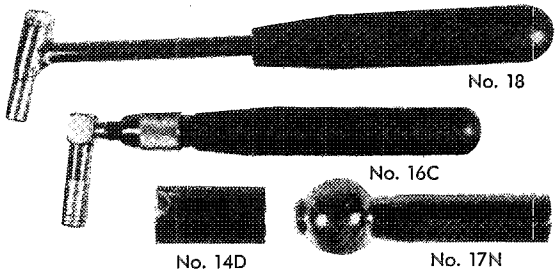

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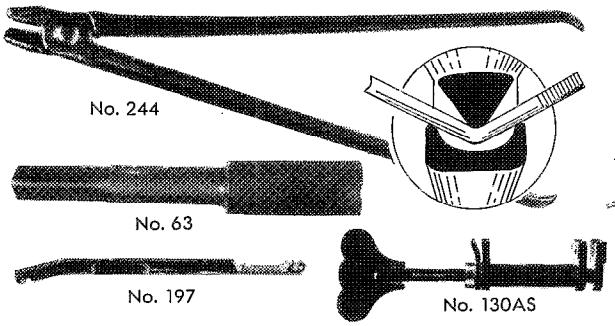

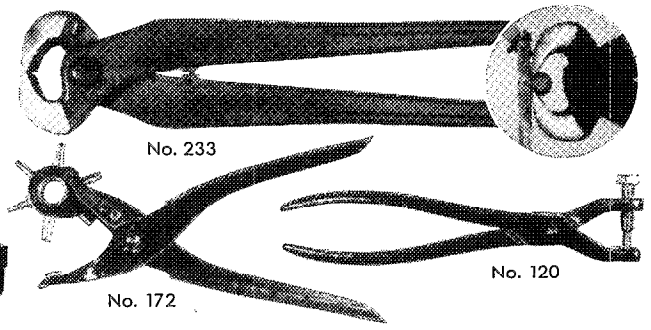

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Official Publication of the Piano Technicians Guild / April 1981 Volume 24 Number 4

Piano Technicians Journal

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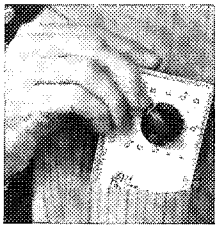

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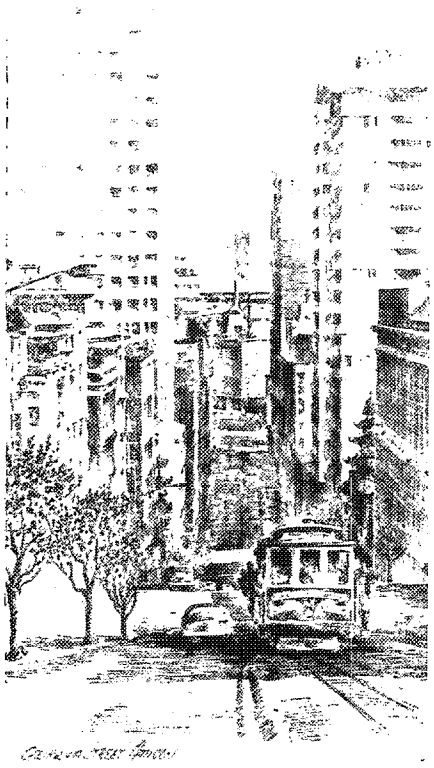

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EDITORIAL

Don L. Santy,
Executive Editor

I would like to call your attention to the following article, a response to my February issue editorial from fine member and good friend Dennis Kurk of the Minneapolis Chapter. This article appeared in the Midwest Libertarian Library Association *Newsletter* and was reprinted with the approval of M. C. Throdahl and *Chemical Engineering News.*

"This is the story of the U.S. pencil industry. Remember, we are looking back from our vantage point of 1990. It's strange to think that, back in 1979, just anyone could use a pencil any way they wanted to.

"You see, it all started when the Occupational Safety & Health Act carcinogen policy went into effect. The graphite in the pencil leads always contained a residue of crystalline silica. And there was at least one animal test and an in-vitro test indicating that crystalline silica produced tumors, so the material became regulated as a carcinogen. There was no alternate for pencils, so exposure had to come down almost to zero. Workers were put into protective clothing, and that solved the problem initially.

"But then the Environmental Protection Agency, acting under the Clean Air and Clean Water Acts which soon had their own carcinogen policies, required drastic reductions in emissions and effluents. The control technology was quite expensive, and only the largest manufacturers could afford it. This caused a flurry of antitrust suits in the early '80's when there were only three pencil makers left in the country. One of the three was split into smaller companies, but they soon went out of business since they were unable to afford increasing stringent workplace and pollution control requirements. Then foreign pencil manufacturers began to threaten to dominate the pencil market, and our government, in an abrupt about-face, allowed a merger of the two remaining companies to meet overseas competition.

"The Consumer Product Safety *Commission then became concerned with what the newspaper headlines were calling the "pencil problem." Rubber erasers could be chewed off and choke small children. The sharp point of pencils could also be dangerous. There were residual solvents in the paint used on pencils, and pencil chewing seemed to be a more widespread habit than anyone had realized. Printing a legend on each pencil that said: 'This Pencil Could Be Hazardous To Your Health' did not seem to affect consumer pencil habits, a Harvard study indicated. In fact, the study found additional potentially harmful uses, such as stirring coffee. This led FDA to declare that harmful substances could be dissolved out of the pencil into the coffee, and thus pencils violated food additive laws, including the Delancey amendment.*

"Trying to salvage its business, the pencil company began making pencils without paint, without erasers, and with only soft leads so they would not hold a sharp point. But consumers were outraged, and sales declined.

"Then someone invented a machine that could measure crystalline silica below the part-per-trillion level, and workplace, air emission, water effluent, and waste disposal regulations required that the best practicable technology be used to reach this low level. The pencil company was threatened with financial ruin because of the large sums needed to purchase new control equipment. There were those that wanted to ban pencils entirely under the Toxic Substances Control Act, but the government decided that pencils were necessary, particularly since they were used to write new regulations. Besides, the senators from the state where the pencil company was located declared that pencils were as American as baseball, and should not be replaced with ball-point pens.

"So the government bailed out the pencil company with a large, guaranteed loan—called a Chrysler loan in those days. But, of course, that was only a temporary measure, and to protect the pencil business, the government eventually nationalized it.

"It is comforting to know, after all, that society is being protected against a danger that was so obvious we didn't even notice it for many, many years. There are still those who complain about paying $17 for a pencil, but you really can't put a price tag on health or safety."

In regard to my February editorial on Anti Trust, thanks to those who wrote so encouragingly along this vein. I appreciate your letters and comments.

I received only one negative letter, and what he told me could best be illustrated by the old joke of the priest sitting next to a very unpleasant lady on a bus. When conversation was struck up it was obvious that the lady was irritable and short-tempered. She finally asked the priest where he came from and the priest replied, "My roots are in Ireland, madam." "Ireland," the lady replied in a demeaning tone, "I would nevergo to Ireland. That country is cold, wet and full of Catholics." The priest looked at her patiently and said, "Well, madam, why don't you go to hell then — it's hot, dry and full of Protestants."

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PRESIDENT'S MESSAGE

Bob Russell, President

This is the time of year when nominating committees report their officer candidates to their chapters. The time when Guild members begin to think about what they can do to serve their organization and add their talents to its growth and strength.

The Piano Technicians Guild is composed of strong chapters whose members and officers have good and progressive ideas ... chapters that are fortunate to have experienced leaders both technically and socially ... leaders who have taken the time to learn the by-laws and are aware of the Guild purpose and standards. The quality that I appreciate most about chapters is their willingness to share with one another. Every month I receive many newsletters from chapters all over the country. I find it very stimulating to see chapters sharing their talented leaders and technical wizards with one another.

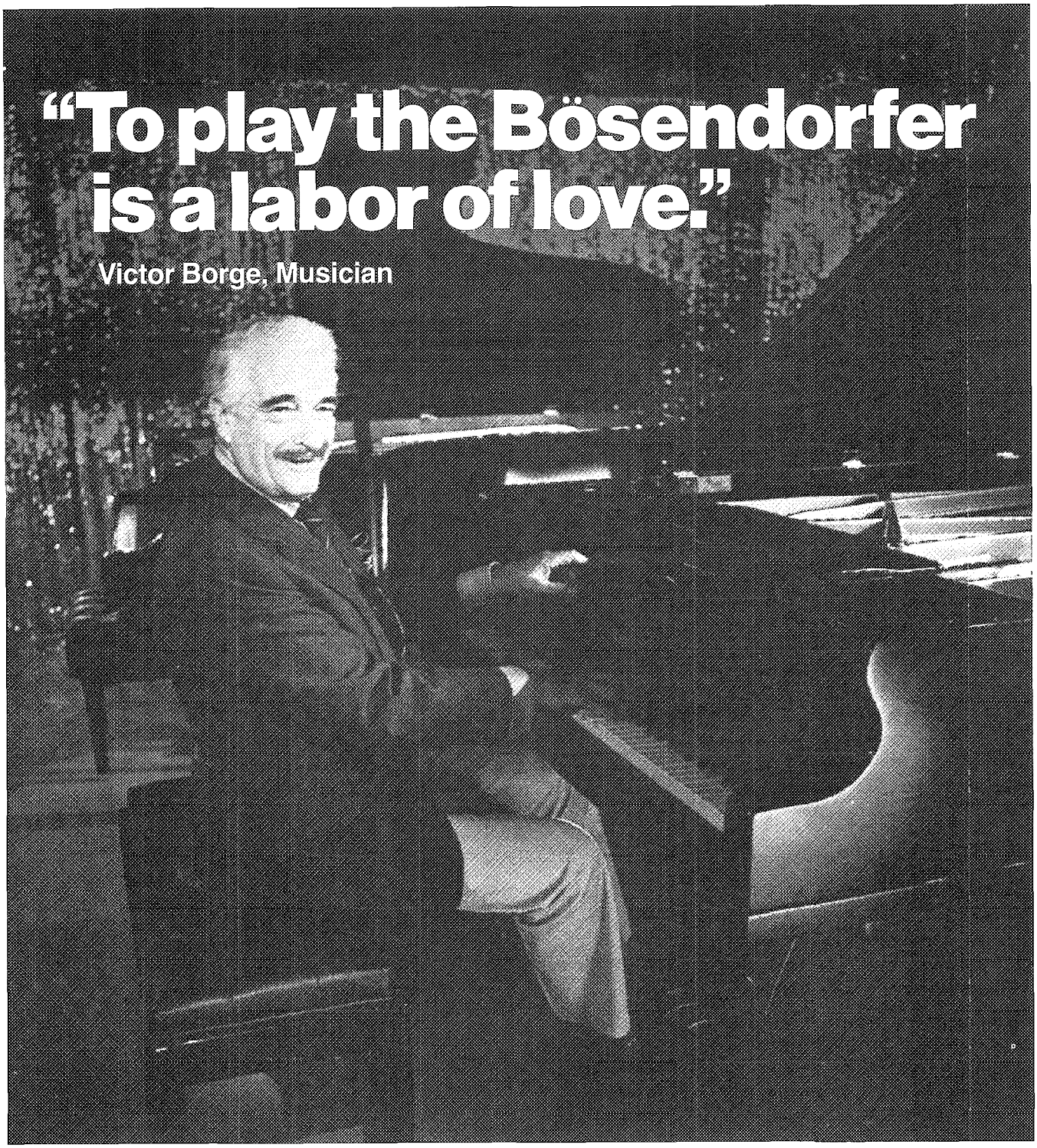
When a new Guild chapter forms they need help to organize. What a good feeling to know that a chapter close to them is willing to offer guidance if they need it; willing to offer a technical if they desire it; willing to support their social functions if they so wish. What a fine quality for a Guild to have!

The realization must always be present that a member can only be expected to give of his time and efforts for so many years. The new members must be willing to learn, to support, and to participate, in order to keep the forward progress alive in any organization. Most of our chapters do a fine job helping their new members to become the leaders of tomorrow. Look around. Does your chapter help new members? Do the new members take the opportunity given them to serve the chapter? If not, perhaps the leaders in your chapter need to put more effort into motivating and helping them. It is a good feeling to see your fellow members take the responsibility for your chapter after your term of service has ended. It is a most necessary happening for every chapter. Of course, it goes without saying that you must add your support to your new officers and show them the same concern they displayed towards you in your office.

We should look over our capabilities and see just what direction they lead us. Are you the one to be the leader? Are you the one to share technical knowledge with your chapter? Do you have the ability to offer warm hospitality and friendship towards the social and brotherhood of your chapter? We all have something to offer. Make your wishes known and work to help your chapter grow. Our present chapter committeemen will soon become the chapter leaders, who will in turn become our national committeemen and officers.

The vitality of your national Guild depends on the strength of each and every chapter. A member of any organization should feel no self glory, no self praise, but there is a great gratification when you see your efforts strengthen the growth and progress of your organization.

Today we are privileged to have a strong Piano Technicians Guild because of your support and hard work. Thank you. □



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THE TECHNICAL FORUM

Jack Krefting, Technical Editor

Someone once observed that an untutored layman could easily tell how large a piano part is by the length of its name. Large parts tend to have small names, like "lid," "rim," or "back," while small parts have longer names. Typical examples would be "hammer-shank" and "repetition lever." The really small parts tend to have very long names, such as "sostenuto upstop felt" or "repetition lever spring adjustment screw."

Sometimes it turns out that way with technical questions, too. Our first correspondent has asked what appears to be a very simple question; yet, because it implies a certain lack of understanding of basic principles, the answer is necessarily rather long. I hope our experienced readers will forgive the following digression to the basics of repinning.

REPINNING ACTION CENTERS

QUESTION: *"... What is the best way to test centerpins for tightness? Also, what is the best device for keeping the pins from coming out? I have heard of using metal guards on every other flange, but I have also been told that they will ruin an action over a period of time. I would like to know if this is true, and if so, why? ..."*

ANSWER: Torque may be measured in a number of ways, depending on the particular type of center and on whether the flange is to be removed from the rail. Grand shank centers, for example, may be checked accurately by the swing test as illustrated in **Figure 1.** Remove the flange screw. hold the flange vertically with one hand, and allow the

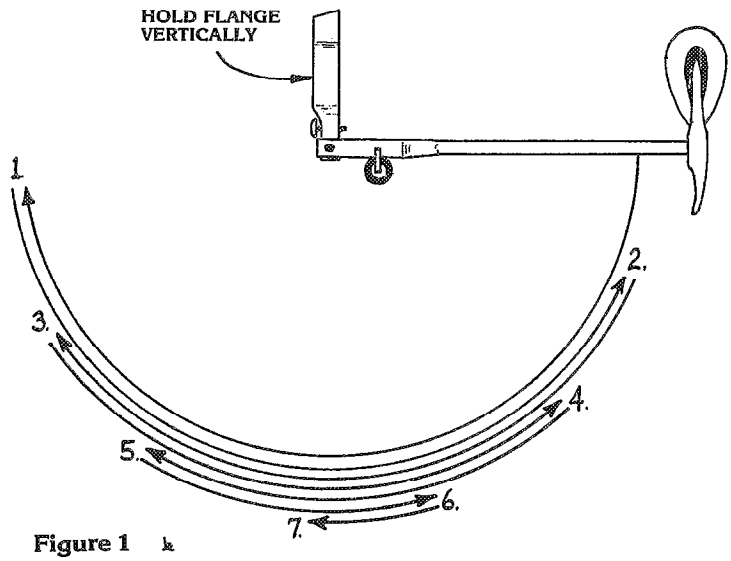


Figure 1

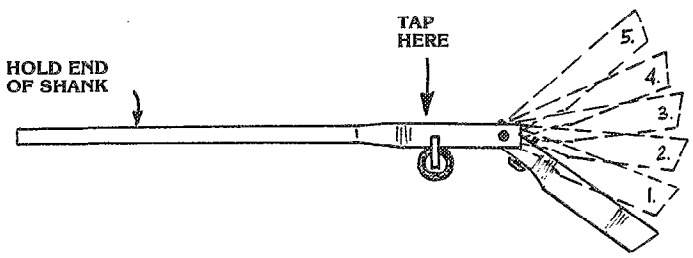
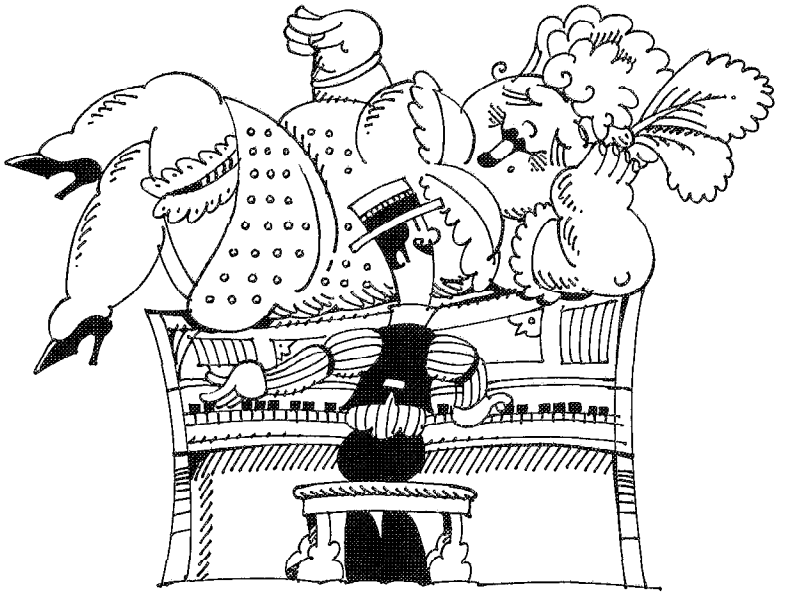


Figure 2

Everlasting Everett.



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hammer to swing back and forth like a pendulum. Count the swings as shown, including the last tiny swing which might be little more than a bump. If fewer than five swings are counted, the center is too firm; more than nine would indicate looseness well beyond what I would consider an acceptable limit. Ideally we would be looking for seven swings.

Obviously the above test will not work if the hammers have not yet been hung on the shanks, so another method must be found. A quick and easy test for new shanks is shown in **Figure 2.** Hold the shank by its hammer end in one hand and tilt the flange downward to about a 45° angle. Then tap firmly downward on the shank, just above the knuckle, with one finger of the other hand. If the torque is about right, this tapping will cause the flange to climb upward as shown. If the center is too tight, the flange will not climb because of excessive friction in the center; if too loose, it will not climb because it hangs down of its own weight. This is a good quick test which will rapidly separate the radically loose or tight centers, but is not as accurate as the swing test or the gauge resistance test.

The swing test, in addition to being accurate, has the advantage of measuring a gradual torque reduction from bass to treble. The bass hammer has more mass and therefore more momentum than a similarly tested treble hammer, so if each hammer swings seven times the bass center will be somewhat more firm than its treble counterpart. This is important, in my opinion, because the treble hammer needs the extra freedom for fast repetition since there is less of a "golf ball" effect on rebound; the heavier bass hammer, conversely, needs the extra support of a slightly firmer center.

Testing torque with a gram resistance gauge, as illustrated in **Figure 3,** takes a bit more time but is very precise. The gauge should not be used vertically because gravity will then affect the resulting reading. Instead, hold the part so the *centerpin* is vertical and place the blade of the gauge 1/16" from the end of the flange (if no other specification is given by the manufacturer). The gauge should be resting on the table, but no portion of the part being tested may do so, especially the flange; otherwise the friction of the flange sliding on the table will cause a falsely high reading. The reading should be made when the pin is moving in its bushing, not at the breakaway point.

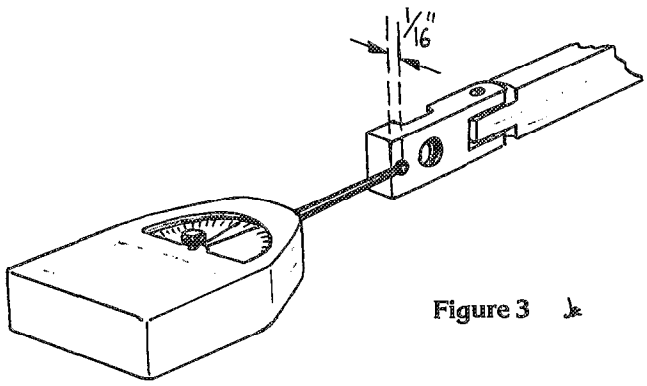


Figure 3

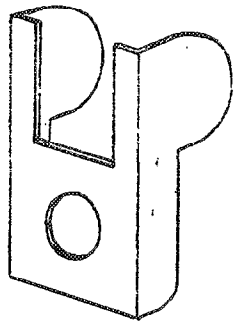


Figure 4

Having tested a few centers by one of the above methods, the technician might elect to use a multiple swing test to rapidly compare many centers without removing them from the rail. Where practical, the entire rail is swung or tilted for observation of the freedom of the centers. Those that are too loose will swing further and with greater freedom than the tested samples, and vice versa. Sometimes it is impractical to use any of the above tests, in which case the torque must be estimated by feel or by the speed with which the flange drops when the weight of a flange screw is added.

Our correspondent, who wished to remain anonymous, has asked about the advisability of using flange guards (see **Figure 4**) to retain walking centerpins. These devices are, in my opinion, worse than useless because they are designed to cure the symptom rather than the disease. If a pin is walking out of a center, it is loose in the wood of the birdseye; the addition of a flange guard does not tighten the pin in the wood, but rather keeps it there so it can wobble until the birdseye is ruined. Besides, the flange screw has to be removed to install the guard, so it would take very little extra time for the technician to repair it properly by repinning with an oversize centerpin. I suppose it would be possible to imagine some kind of emergency situation where the temporary use of such devices could be justified, but that would be the only way I would consider using them.

Sometimes a center will be tighter on one side than the other, in which case the usual testing

methods may yield misleading results. A grand hammer flange center, for example, might pass the swing test and still wobble on a hard blow. The symptom to look for would be unusually wide string cuts in the hammer, indicating that it has not been striking the strings in the same place every time. One test which is effective is to place a screwdriver shank under a group of shanks and slide it back and forth, watching the hammers for any sign of movement. The hammer that is loose on one side will twitch a little. **Figure 5** illustrates one centerpin which is working its way into the seam of the bushing, and another which missed its bushing altogether. The former condition is caused by bushing with cloth that is too narrow, and this might go undetected for quite awhile. The latter is easy to spot because the part travels so far out of line, even when new, that it is almost impossible to miss.

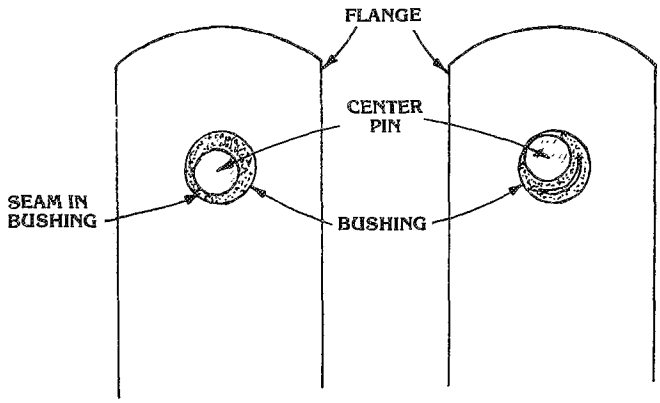


Figure 5

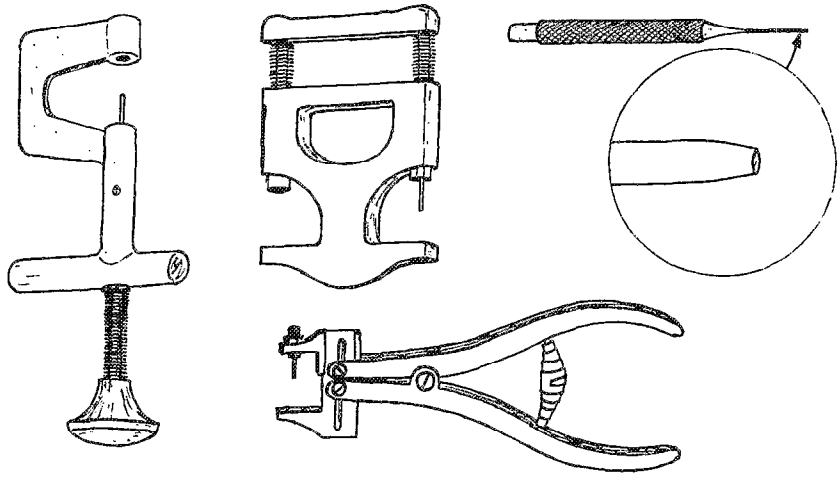


Figure 6

One factor that should be considered when repinning is the side clearance of the birdseye. If there is no clearance at all, the friction between the flange and the birdseye will cause tightness and can be misleading. Reaming the bushing in such a case will result in a center that still has a high torque reading but wobbles. When this is encountered, the technician should remove wood from the inside of the flange arms, never from the birdseye. Then the center should be checked for proper clearance before repinning.

If the side clearance seems excessive, the technician should remember that the pinned part will migrate back and forth. The pin should be cut slightly long in this instance so that the cut end cannot dig into the cloth bushing. Speaking of cutting pins, I should mention that there is a school of thought which dictates that both ends of the pin should be cut to keep the pin from walking out of the center. In my opinion, this is not the best practice because the next time that center must be repinned the technician must force a ragged, burred end through not only the bushing but the birdseye as well. Besides, if we are relying on a rough surface which can damage the bushing to hold the pin in place, we are once again treating the symptom rather than the disease. The pin must be tight enough in the wood of the birdseye that it cannot walk out, period. Cut only one end, the pointed end, so that the smooth end can be forced through the center the next time it is removed.

Figure 6 illustrates some of the tools available for removing centerpins. There are others, including one that mounts on a workbench for production shop use. They all work fairly well, but I prefer the tool in the upper center because it also pushes the new pin into the center; the important things are that (1) the tool must have a parallel action, and (2) the tip should be ground to a slight taper as shown in the inset of the pin punch at the upper right.

Never repin with a smaller size pin. Remember that the pin must be tight in the birdseye or it will wobble and walk out. If a center is too tight, remove the pin and ream the bushing, using tools such as those shown in **Figure 7.** The tapered reamer (not for use with teflon) removes wool fibers from the cloth, but should never be used on the birdseye because that would taper the hole and cause looseness and wobbling in the near future. If the birdseye is damaged due to a wobbling pin, either discard the part or ream it with a straight reamer. If the wood is split, replace the part.

The burnisher is not always essential, but it does a nice job of smoothing the wool after the reamer has ruffled it. Experience has shown that if a burnisher is not used, the center must be pinned slightly tighter initially

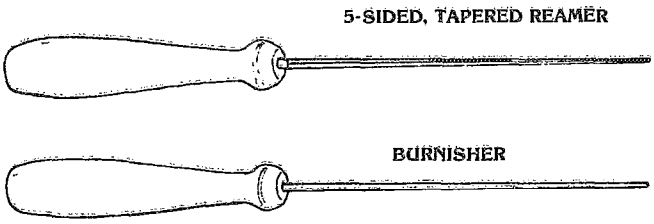


Figure 7

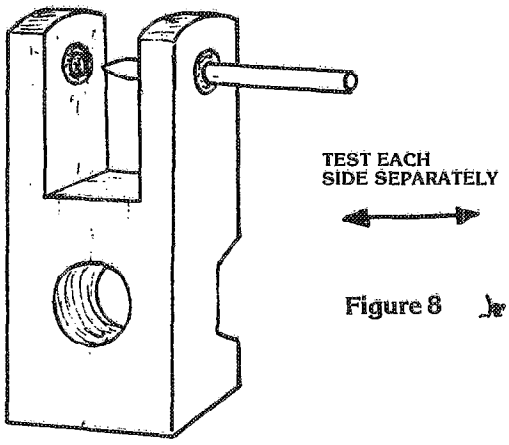


Figure 8

because the pin itself will eventually press the fibers, loosening the center just a bit.

Whether reaming, burnishing or both, it is essential that whatever is done to one side must also be done to the other so that the torque will be equal. Traces of red wool will be left on the reamer after reaming one side, which serve as a guide when reaming the other. This works well when reaming and repinning an occasional flange. If an entire rail of flanges is to be repinned, it is faster and more accurate to use a knurled centerpin as a reamer. Roll a centerpin between two files to knurl it, chuck it in a pin vise (available from supply houses) and ream with a push-pull motion. A twirling motion will also work, and individual preference will apply. The knurling becomes dull after about twenty flanges have been reamed, so replace the pin periodically as the work progresses.

A good centerpin gauge, or preferably a micrometer, is essential. Even if the piano has not ben repinned since leaving the factory, there is always the possibility of an oversize pin here or there. In selecting the proper size for replacement, our first consideration must be the fit of the pin in the birdseye. This is true even if that means the pin is too tight in the bushing, because the bushings can be reamed as needed. Try to push a pin into a birdseye, without the flange. If it goes in with finger pressure, even hard finger pressure, it is too small. Try the next half-size larger, and so on, until the pin cannot be forced in with thumb and fingers. I try to avoid using a pin larger than 21½ on the theory that the birdseye is already stretched enough that there is the risk of splitting the wood, not to mention the large increase in bearing surface against the cloth.

When the pin has been selected to fit the birdseye, test it for torque on each side of the flange as shown in **Figure 8**. With a little experience, the technician can easily predict the torque of the pinned center by the way the pin feels in each side of the unpinned flange. I have no resistance measurement to offer, and will suggest only that the inexperienced technician experiment and get the feel of it. The proper amount of resistance will vary anyway, depending on the function of the particular center. Hammer flanges should be more firm than any of the other centers, usually measuring a resistance of five to ten grams at the flange, depending on the make of piano and the time of year.

Wool cloth bushings should be pinned slightly tighter than normal if the work is being done in humid weather, and vice versa, so that the centers will be within acceptable torque tolerances all year. A properly pinned center never requires lubrication in normal humidity conditions, and the technician should not use any lubricant unless that particular product has been specifically recommended for that purpose by the manufacturer of the piano.

BAR PIANO

QUESTION: *"I have a client who wants an old upright fixed up for just 'hard barroom', honky-tonk sound. He doesn't want the honky-tonk bar put on, however. How do I do this other than hardening the hammers?"* — **Raymond Springman, Montoursville, Pennsylvania**

ANSWER: First of all, I would point out to the client that the sound he wants was never designed into the piano, but was the result of gross neglect of proper maintenance. Honky-tonk pianos have a distinctive metallic sound as a result of compacted, worn-out hammer felt; and they sound out of tune because they aren't tuned regularly, if at all. In short, the client is asking for a piano that is in the worst possible condition. It's easy to make a piano sound that way, much easier than making it sound the way it was designed to sound. The easiest and cheapest way to make any piano sound that way is to simply neglect it.

The "rinky-tink bar" available from supply houses is not good for the piano anyway, since the metal clips on the tabs tend to dig into the hammers and will not strike the strings evenly. People have stuck thumb tacks into hammers to achieve the same effect, which also ruins the hammers because of the large hole which is made in the striking surface when the tack is pressed in place.

My first reaction to such a request would be to refuse, if for no other reason than that the client

might inadvertently let someone know that I had worked on the piano. He might be proud of it, but others might not think that the tone quality was particularly desirable, especially if it had been produced at a considerable expense by a professional piano technician. But if you really want to do it, you will have to harden the hammers. I know of no hardening solution that is reversible, so the client should be told that his hammers will be permanently hard as rocks, and that this condition could well cause abnormal string breakage. The application of a lacquer solution or other hardener to the striking surface will turn the instrument into a real clanger.

To achieve the honky-tonk effect, the piano should never be tuned. However, I suspect that the client doesn't really want the piano a half-step flat in the bass and a minor third flat in the high treble, as would be normally the case when many years pass without tuning. He probably wants it up to pitch, but with jangling unisons. My suggestion would be to tune all center strings normally, and then set the outside strings to whatever level of dissonance the client has in mind. He should be present at least while the first few "unisons" are "tuned", but before he leaves you should extract a promixe from him that he will never reveal your identity to anyone.

KEY DIP

QUESTION: *"Regarding your dip block article* (January 1981 issue) *on page 12, center column, you mention, '... if both sides are to be used, both must be identical.' A thought runs through my head that feels fairly new — maybe something from a recent Journal: A dip block has only one top side, the side that's 90° to the front of the block. Only this way can the block be flush with the adjacent key when the key being tested is pushed down. I don't know if this is right or not, but I remember hearing or reading it. Any comments?"* — **Martin Tittle, Ann Arbor, Michigan**

ANSWER: That is absolutely correct, as illustrated in **Figure 9.** The difference would become greater the shorter the key, because the angle there is greater, but there would be a small difference regardless. If the block were upside down, it could not line up with adjacent key fronts at both top and bottom; and if the overhang is used as a point of reference as usual, the block would go slightly further toward the fallboard, indicating that more dip is needed.

Apparently I didn't make myself clear. I was referring to both sides of the top surface, not to the top side and bottom side. Our thanks to Martin for making this distinction.

SOAPSTONE

QUESTION: *"... In various classes at Guild seminars I have heard that knuckles and keybeds should be lubricated only with a soapstone stick or with talc. Other lubricants seem to be controversial, but nobody says that soapstone is bad. On the other hand, nobody has said just what soapstone is or where it comes from, other than that you can get it at a welding shop. What is it?"*

ANSWER: Soapstone is a soft, usually massive mineral also known as *steatite.* It is foliated, which means that it is comprised of many thin layers, and tends to be impure in its natural state. It has a greasy feel and it is resistant to the flow of electrical current, so it is primarily used for lubricants and electrical insulators. When purified and ground into fine particles, it is known as *talcum powder,* or *talc* for short. It is magnesium silicate, scientifically expressed as $Mg_3Si_4O_{10}(OH)_2$, and somebody presumably digs it out of the ground when they are mining for something else, because I have yet to hear of a soapstone mine. On the other hand, I learned only recently that kapok grows on trees, a fact which would have surprised me even more had I been interested; the main lesson there was not to presume too much. Possibly our readers can supply additional information on soapstone, which will be published as interest warrants.

CRACKED PLATE

We have received a very interesting letter from Ed Reineck regarding an unusual repair which, we are happy to report, is apparently successful. Ed did a lot of research and went to a lot of trouble to solve his client's problem, and we present his report here:

"You will recall from brief conversations in Detroit in May and Cincinnati in October that I have been seeking a means of repairing a cracked plate in the tuning pin panel area of a 50-year-old 5'6" Bauer Grand. Via Arthur C. Mau of Australia you located a firm in Milwaukee that employs a cold process to repair fractures in cast iron. (Your article in the PTG Journal, June 1980, pages 8-11). This is my report to you about repairing the above piano.

"In mid-September Ralph Eder, President of In Place Machining Company, inspected the cracked area of the plate and was willing to attempt a repair with some expectation of success, but certainly no guarantees. His repairmen worked on the piano December 23, 1980 and in my judgment the repair is successful. I will check

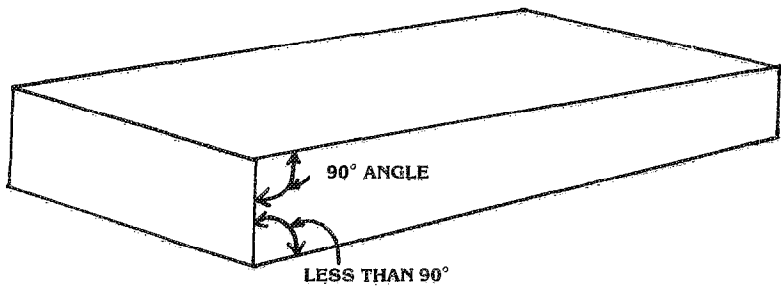


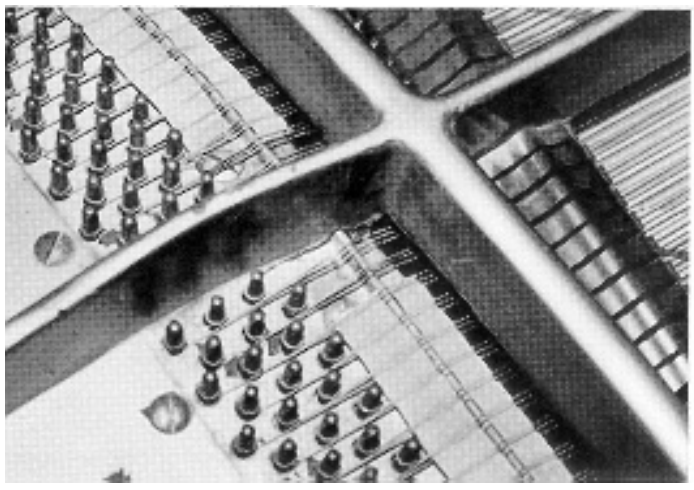
Figure 9

the piano again in April when I expect to do some other work on it. (I may not have mentioned before that the piano resides 300 miles from my shop — hence I cannot check its pitch as often as I would like.)

"The prints are enclosed for your inspection. Numbers 1 and 2 show that the crack did not close even when the string tension was zero. Therefore it seemed advisable to close the crack firmly before any metalace process was attempted. This was done by a rather conventional procedure which I was unable to photograph. (See **Figure 10** *— ed.)*

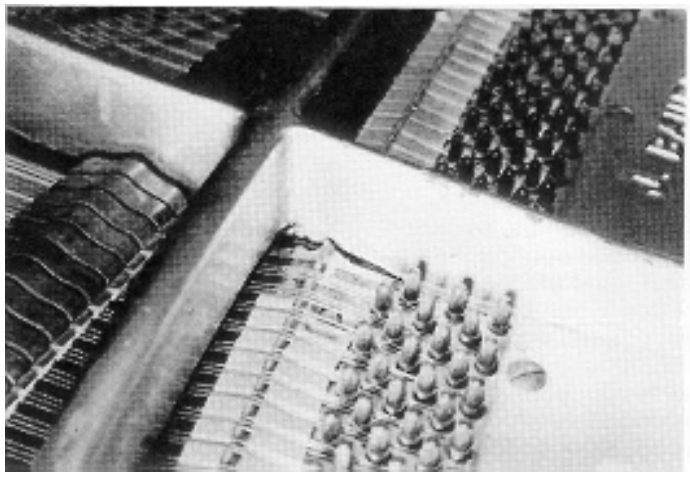
"By means of a right angle attachment to an electric drill, the repairmen drilled (and tapped) through the plate at shaded areas D and E. Drilling, of course, was done from the area normally occupied by the piano action. After the bolts were firmly tightened, the crack was closed. They then did some metalacing in the crack on both sides of the bar. Three 3/16" studs were inserted, 1 inch apart in the 3 inch crack.

"I should mention one test I have already given to the repaired area. To provide access to do Metalace on the crack, I had to remove about 15 tuning pins from each side of the lower treble bar. When it came time to replace them, I expected to use 4/0 size. However, at this point I found that the old pins in the piano were smaller than 2/0. Anyway, I supported the pinblock properly, and drove in size 3/0. (It took a lot of pounding to do so!) However, the repaired area held up fine. The piano was raised to A-440 (in three tunings). I'll check it again in April." — **Edward A. Reineck, Summit Lake, Wisconsin**



1

Top view from the treble side. Note the crack in the web.



2

Viewed from the bass side, it is apparent that the web is pulling downward away from the plate bar.

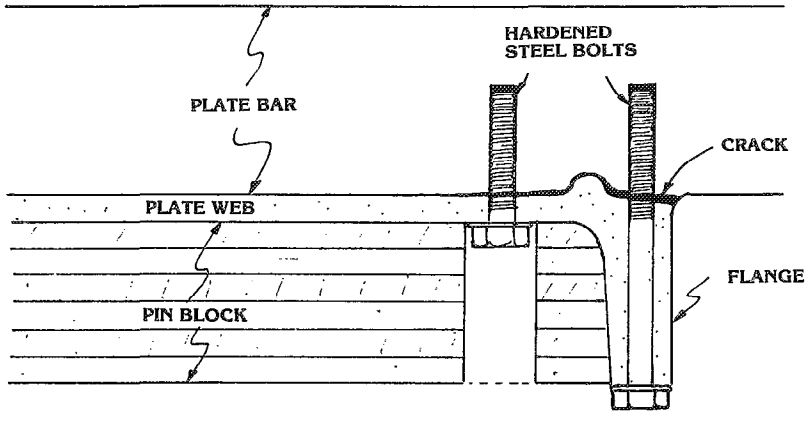
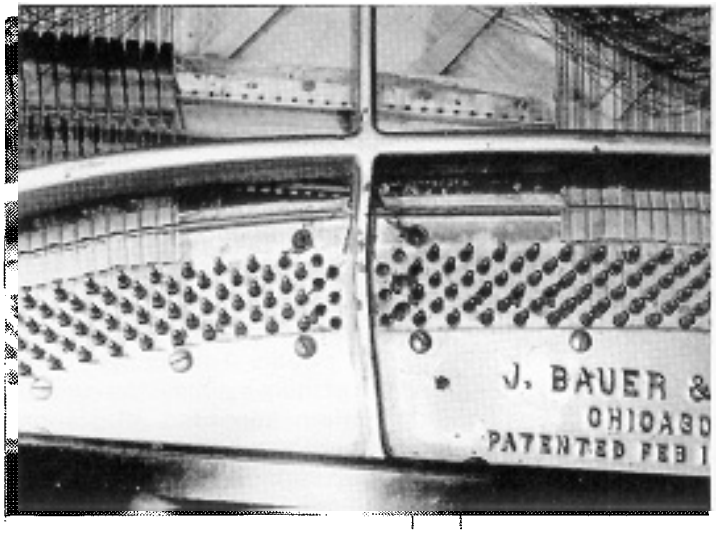


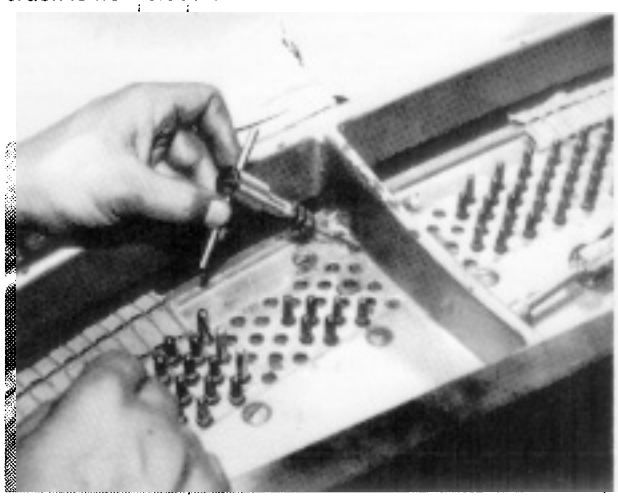
Figure 10



A partial teardown was necessary to provide working clearance. At this point the web was bolted from below (see text and Figure 10).

The workman begins the Metalace process. Note that the crack is now closed.

A series of holes must be drilled to fill the crack with threaded studs.



Each hole is tapped so the studs will overlap, each one biting into its predecessor.

TECH TIPS

Our first tip comes from Robert Musser of Grand Junction, Colorado. Bob suggests that, in the event the tuner has trouble following the sequence of tuning pins in the bass of some pianos, the tips of the pins of every other pair of bichord unisons can be marked with a black permanent marker pen.

Barry Heismann of Cincinnati, Ohio, suggests a way of using the extra pieces of core wire that are cut off when installing a new set of bass strings. He sticks them in a piece of corrugated cardboard, segregated by diameter, so they will be handy for use in splicing strings. There is no need, Heismann points out, to carry full coils of all sizes when short pieces will do the trick. Incidentally, people who do a lot of splicing suggest that the new piece to be added should be one-half size larger than the existing core for best results.

Hugh Manhart of Omaha, Nebraska, thinks that there may still be technicians who twist new bass strings by loosening the tuning pin, removing the string from the hitchpin, twisting, replacing on the pin, and then pulling the string to pitch. Hugh asks that we once again mention the fact that the tuning pin may be twisted before it is pounded into the block, which accomplishes the same thing. Consider it mentioned, Hugh, and thanks.

NEWSLETTER TECH REPRINT

The January 1981 issue of Cleveland's *Butts & Flanges* carried the following, which was submitted by our old friend Paul Bergan of Port Bolivar, Texas. It involves two uses of tee-nuts, one of which is illustrated in **Figure 11.** Our thanks to Paul and to the Cleveland Chapter for the following article:

Problem: Upright Pedal Problem Solved With Tee Nut

You inspect lower portion of pedal attached to the bottom board, and find that the screw hole has become so enlarged an oversize screw won't work. What to do?

To plug the hole takes time. One could tilt the piano on its back and insert a bolt with nut at bottom. However, this takes time and man power and your tilter is at the shop.

Solution: A tee nut is just the thing: If you have enough clear-

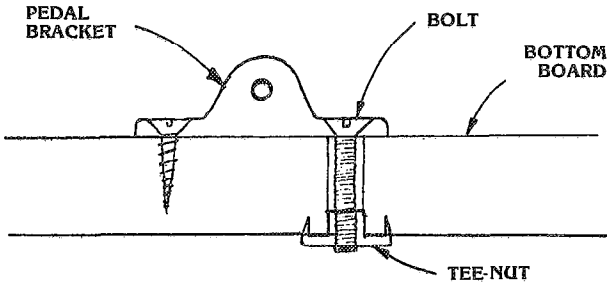


Figure 11

ance beneath the board to insert a pair of tweezers you can proceed. Hold tee nut in tweezers and line it up with enlarged screw hole. Now insert a machine screw (with same thread) through inside of bottom board and connect bolt to tee nut. The more you tighten bolt screw head the more the claws of Tee Nut bite into bottom board. Now your pedal bracket lever is good and tight. Cut off bolt where it extends beyond tee nut at the bottom.

Note: If you don't have enough room to insert tweezers, tilt piano back a little and prop with small 2x4 blocks under front. Now you can work in comfort.

Another use: Use tee nut in repairing enlarged hole in a grand lyre. However, lyre hole must be drilled completely through the key bed; then countersink head of bolt in order that the action will not be obstructed in sliding back in.

Tee nuts available at hardware stores in following sizes:

Size	Machine Screw	Need to Drill
3/16"	#10-24	1/4" hole
1/4"	#20	5/16" hole
5/16"	#18	7/16" hole
3/8"	#16	1/2" hole

READER COMMENT

"I just read Allen Wright's comment (January 1981 issue) regarding Dave Roberts' column and wish to add my appreciation to his. I don't think that it is readily apparent the degree of innovation that is manifest in these articles. The impression one gets from the column itself, and in my case from speaking on the phone with Mr. Roberts, is that he simply read appropriate articles and sort of summed them up. (Although he did allow it was a lot of work.)

"Well, I have now read some of his source material and am simply astonished with the skillful integration, modification, and (thankfully) simplification that he has accomplished. The obvious problem with Mr. Wright's hope for continued articles on this level is that "The Calculating Technician" will be a very tough act to follow."
— Mark Midthun, Decorah, Iowa.

IN CONCLUSION

This issue, I am sorry to say, marks the end of the "Calculating Technician" series by Dave Roberts. I would like to echo Mark Midthun's praise of the series, which will be difficult, if not impossible, to replace. Thanks, Dave.

I am happy to announce that Jack Greenfield of Chicago, who has written several articles for us on an occasional basis, will become a regular contributor. The focus of his series will be piano history and literature, beginning with this month's fascinating account of Thomas Jefferson as a technician.

As always, we need technical tips, articles, questions and comments for publication. Please address all technical correspondence to:

Jack Krefting, c/o Baldwin Technical Service, 1801 Gilbert Avenue, Cincinnati, OH 45202. □

Reader Feedback

Dear Mr. Santy:

I heartily endorse your correspondent Roland Loest (Journal, October 1980) in his call for a reassessment of the square grand piano. In Australia the square grand is almost unknown to the general music public. Tuners who are aware of them maintain the cynical damnation accorded all pianos that are seen to be a non-commercial proposition and are duly placed in the "too hard" basket.

I believe myself to be the only professionally trained and qualified pianist active as a performer on early pianos as well as a capable tuner/technician and restorer in Australia. Living at present in London, I have seen many fine examples of square restoration in collections, concerts and showrooms. To be understood the square piano must be seen as all pianos, in the perspective of the period of construction, country of origin and purpose of design. The early square was the logical development of 18th century concepts and requirements. It continued to develop as an equal alternative to the domestic upright, bridging the gap between that and the fast-developing Flugel grand to the satisfaction of generations of amateur and professional musicians.

The comparison of early pianos to the modern piano is fruitless. The technician with any aesthetic conscience and true historical interest in his craft damns himself if, in failing to cope with an early instrument like the square grand, he seeks to destroy or dismiss it.

K. G. Schenscher

Karl-Graeme Schenscher
London, England

Calculating Technician

Part XX

Dave Roberts

Last month, we examined the scale of a typical small grand (5'4") and compared it to that of a Steinway concert grand which we had analyzed previously (January 1981 article). Suspected scaling flaws from listening, tuning and tuning stability tests in the small grand scale were confirmed by a comparison of calculated inharmonicity I_4, loudness **Z**, hammer/string contact time factor **NT/H** and speaking length elongation E_L in the two instruments.

On the one hand, these calculated quantities change in an almost computer perfect smooth fashion from one end of the keyboard to the other in the concert grand, whereas the smaller piano exhibited significant jumps in these same calculated quantities near the bass/treble break. This is especially typical of small pianos with no wound strings on the treble bridge and, as we pointed out last month, occurs primarily because of the prominent reversal of curvature near the bass end of the treble bridge in the majority of small instruments.

To put it another way, the problem is due to prominent foreshortening of the speaking lengths near the bass end of the plain wire section, compared to the proper speaking lengths as given by Braid White's *rule for treble scaling* (April, 1980 article). Before we discuss scale modification for this small grand in order to bring it into conformance with modern scaling practices, let me make some comments about Braid White's rule.

Some of you may have judged my off-hand acceptance of most of the treble scale in this small grand, just because it conforms reasonably well to Braid White's rule, a cop-out for a 'calculating technician'. After all, what did Braid White know about inharmonicity and how could such a simple-sounding rule be so universally valid? To answer this point, you should know first of all that Braid White did not make up this rule out of the clear blue. What he did was verbalize an industry consensus in the early 1900's which, of course, represented a tremendous amount of scale development work up to that time and even the virtual perfection of the large (concert-size) instruments. Many variations from this rule were no doubt attempted, but this consensus of many dedicated minds has prevailed even up to the present time with no significant variations that I am aware of, except possibly one which I'll now attempt to explain.

As indicated in our January 1981 evaluation of the Steinway concert grand (very close conformance to Braid White's rule, as you would expect), the inharmonicity in a conventional scale decreases by a factor of about 3.0 for each octave as you proceed down the keyboard until you approach the wound strings. This has some profound implications on a piano's tunability and tone.

For instance, it is impossible in a conventional scale to get the various sets of partials (1-2, 2-4, 3-6; 1-4, 2-8; 1-8, etc.) in the single and multi-octave intervals (or any interval for that matter) to beat (or not beat) the same. This is a consequence of the way in which inharmonicity changes in a conventional scale and has at least one virtue in that it helps to "fuzz-out" the errors inherent in equal temperament.

On the other hand, this situation makes tuning a piano difficult because you can't simultaneously tune single, double, triple octaves, etc., to be perfectly in tune with themselves or with each other. Instead, the tuner has to compromise using very carefully controlled octave stretching for a 1st class job. A good compromise is usually quite acceptable, at least in the larger instruments, but it does require considerable skill.

Now, what would you think if I told you that there is a way to design a piano scale that would allow perfect octave tuning with no such compromising? Impossible? Well, not on paper at least. Theoretically, if you design a scale so that the inharmonicity decreases by a factor of 4.0 per octave instead of a factor of 3.0 per octave as you proceed down the scale, you will have precisely that situation. It's a mathematical fluke in a way, but several present day piano manufacturers have attempted to incorporate this idea into a portion of their treble scales in order to improve tunability. There are several ways to do this, but all require that the treble bridge sweep away from the hammer line more rapidly than in a conventional scale.

For instance, one way would be to change Braid White's rule to state that speaking lengths should increase by 6.08% per unison instead of 5.67% per unison as you proceed down the scale and, at the same time, increase wire gauges by one half size every 12 unisons instead of every 5 unisons. There are other problems with a scheme like this, but the results are interesting if nothing else. The real question is whether such a scheme is really superior to the conventional scale. In principal, it does make the tuner's job easier, but do other sacrifices and problems make this consideration worthwhile? I won't pass judgment here, because I don't have enough experience with this kind of scale, but I thought you would be interested to know that such a scale is possible. Also, I hope by now that you realize that the seemingly simple treble scaling rule verbalized by Braid White has complex implications and should not be trifled with.

Now back to the main problem at hand ... how to improve the scale in the bass/treble break region of our small grand. **Table I -(1)** reviews the situation, discussed last month, with regard to calculated inharmonicity I_4, loudness **Z**, hammer/string contact time

factor **NT/H** and speaking length elongation E_L near this break. If we do a proper job of rescaling then it probably should not be necessary to have that 3rd unison string on the top 2 notes on the bass bridge. Remember, this was a contrived solution to an inadequate job of scaling in the original design... at least that is my opinion. So let's first remove that 3rd string from A25 and A#26 and see what we're left with. As **Table I - (2)** shows, the roughness in **Z** and **NT/H** from G#24 to A25 is now eliminated, but there is still considerable roughness across the bass/treble break.

We could try all kinds of solutions, but experience has shown that there is only one simple way to compensate for this kind of foreshortening of proper speaking lengths on the treble bridge, and that is to place some wound unisons on that portion of the treble bridge where the curvature has reversed back toward the keyboard. If there is no prominent point where this foreshortening or reversal begins, I've found that a good place to start is where the calculated inharmonicity I_4 first starts rising as you proceed down the treble scale. **Table I** - (1) shows that this occurs at D30, where I_4 has risen from 3.1¢ to 3.4¢. Thus our task is to smooth the transition in I_4, **Z**, **NT/H** and E_L (in this order of importance) as best we can from D#31 to A#26.

Again, experience shows that the best way to deal with this situation is to switch to lightly wound bichords from B27 to D30. For starters, let's leave the steel wire size as is (44 mils) on these 4 unisons and simply add #36 W/M copper wrap, which is the most common lightweight wrap available. Let's make the unwrapped end segments a and b equal to ½" for the time being (November 1980 article). With a programmable calculator, it takes about 2-3 minutes to calculate and write down I_4, **Z**, **NT/H** and E_L for these 4 unisons. The results are shown in **Table I - (3)**.

As you can see, we now have a much improved situation with respect to **Z**, **NT/H** and E_L across the bass/treble break, but a jump in I_4 remains and we've created some new problems at the new plain/wound transition D30/D#31. We can fix up the A#26/B27 transition by (1) going to a 45 mil core at B27 (increases I_4 to 2.4¢ and **Z** to 1247) and (2) increasing the unwound segments a and b from 0.5" to 1.1" (increases I_4 further to 2.8¢, with no effect on anything else). The D30/D#31 transition is more difficult. The loudness **Z** is already too large at D30 and I_4 is too small. We can raise I_4 a little by increasing a and b, as before, but if we change the core size one way or the other, we're going to make either I_4 or **Z** better at the expense of the other. Clearly we need to do something else.

That something else, it turns out, is to find a lighter wrap for D30. As I explained in the September, 1980 article, the best we can do from commercial stringmakers is either a #43 W/M copper wrap or a #28 W/M aluminum wrap, so with a few more minutes of trial and error calculations I finally come to the conclusion that the best D30/D#31 transition occurs with a 43 mil core wrapped with #28 W/M aluminum and both a and b set at 1.2". I don't like to make a or b over 1", but it's the only choice I have in order to bring I_4 at D30 up close to the value of 3.1¢ at D#31.

That's it. Once you've got the plain/wound transition and the bass/treble transition, the rest (C28 and C#29) is easy. The final proposed scale modification actually uses aluminum wraps exclusively (you could mix aluminum and copper if you wished) and this is shown in **Table I - (4)**. Not shown are the new wire tensions (around 200 lbs) and percent of breaking tension (around 40%), both of which are entirely acceptable. In fact, the combined tension of each pair of aluminum wrapped bichord strings is about the same as the combined tension in each unison of corresponding original plain trichords.

TABLE I. SCALE MODIFICATION in a 5'4" GRAND*

m	L	d	D	a	b	N	I_4	Z	NT/H	E_L
(1) Original Scale										
G23	38.9	41	79	1.0	0.6	2C	2.7¢	1485	79	0.19
G#24	38.3	41	76	1.0	0.6	2C	2.7¢	1438	81	0.19
A25	37.7	41	70	1.0	0.6	3C	2.8¢	1568	115	0.18
A#26	37.1	41	68	1.0	0.6	3C	2.8¢	1546	120	0.18
B27	40.7	44	44			3P	3.8¢	809	66	0.10
C28	39.8	44	44			3P	3.7¢	838	73	0.11
C#29	39.0	44	44			3P	3.5¢	870	80	0.11
D30	38.2	44	44			3P	3.4¢	903	88	0.12
D#31	37.2	42	42			3P	3.1¢	849	88	0.12
E32	36.2	42	42			3P	3.1¢	875	96	0.13
(2) Remove middle string from A25 and A#26										
G#24						2C	2.7¢	1438	81	0.19
A25						2C	2.8¢	1280	76	0.18
A#26						2C	2.8¢	1262	80	0.18
B27						3P	3.8¢	809	66	0.10
(3): Add #36 W/M copper wrap to B27 through D30										
A#26	37.1	41	68	1.0	0.6	2C	2.8¢	1262	80	0.18
B27		44	61	0.5	0.5	2C	2.3¢	1206	81	0.19
C28		44	61	0.5	0.5	2C	2.2¢	1250	89	0.20
C#29		44	61	0.5	0.5	2C	2.1¢	1297	98	0.21
D30		44	61	0.5	0.5	2C	2.1¢	1346	107	0.22
D#31		42	42			3P	3.1¢	849	88	0.12
(4) Final Modification — use aluminum wraps										
G#24		41	76	1.0	0.6	2C	2.7¢	1438	81	0.19
A25		41	70	1.0	0.6	2C	2.8¢	1280	76	0.18
A#26		41	68	1.0	0.6	2C	2.8¢	1262	80	0.18
B27		45	89	1.1	1.1	2A	2.8¢	1234	83	0.18
C28		44	83	1.1	1.1	2A	2.8¢	1157	82	0.18
C#29		44	78	1.1	1.1	2A	2.8¢	1121	84	0.18
D30		43	74	1.2	1.2	2A	2.9¢	1077	86	0.18
D#31		42	42			3P	3.1¢	849	88	0.12

* Refer to the November 1980 article for a complete discussion of the symbols used in this table and also the calculation formulas referred to in the text.

Hence, we've changed the overall tension in this scale very little with this modification. Most importantly, we've eliminated the 36% jump in I_4 at the bass/treble break and, at the same time, reduced the 91% jump in Z and the 82% jump in NT/H to only 2% and 4%, respectively. The 80% jump in string elongation at the bass/treble break has been moved and reduced to a 50% jump at the new plain/wound transition D30/D#31. That's about as good as we can hope for unless we're willing to design a tenor bridge for our new wound strings. Then, and only then, can you get all 4 mechanical/acoustical quantities I_4, Z, NT/H and E_L to change in a near perfect fashion across the plain/wound break in a small piano. The Mason & Hamlin AA and A.B. Chase grands are good examples of this.

A close resemblance to the above scale modification was actually carried out on my own piano several years ago when I was using slightly different formulas than I have given you in these articles. Even that modification was judged successful by other piano technicians and pianists, but the refinement in the present formulas is in part a result of those early scaling experiences.

This marks the end of this series of articles. Thanks to Jack Krefting for asking me to write this column. I will be teaching a class at the National Convention this year, so I'll see all you 'calculating technicians' in San Francisco. □

VON DER WERKSTATT

Priscilla and Joel Rappaport

LEANING TOWARD TROUBLE

As you look at a grand piano to estimate repairs needed, you probably automatically place this instrument into one of several broad categories: 1) touch up repairs and regulation, 2) overhaul of action, or 3) major rebuilding using new parts, requiring shop facilities.

For many technicians, the line dividing whether they can do the complete job themselves or must farm out some of the big work lies at the pinblock. If the pinblock needs to be replaced, extra arrangements must be made. Therefore, a very important part of any grand piano evaluation is judging the condition of the pinblock.

Everyone has his own method of testing the tightness of tuning pins in the block whether it is purely by feel or through the use of a torque wrench. This article, however, will point out an observation that should be included in your routine.

There are cases when the pins may be adequately tight but the piano still refuses to stay in tune. A look at the position of the pins may provide a clue. If the pins are leaning forward (toward the strings) or are even straight up and down, it would indicate one of two things.

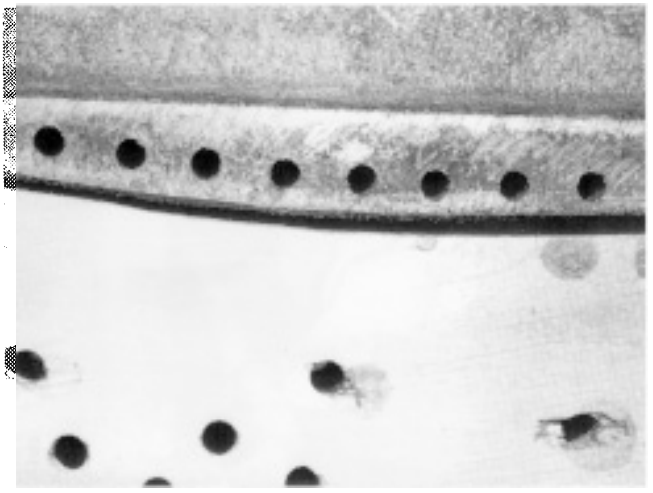
Either the holes in the pinblock were incorrectly drilled or there may be something basically wrong with the fit of the pinblock to the plate flange. Another indicator of the same troubles is if the pins are positioned toward the front of the hole in the plate, almost or actually touching the plate. If plate bushings are present, the hole in those will be elongated into an eliptical shape.

Let's review what is correct and how it should look (or feel to sight-handicapped technicians making an evaluation). Basically, the pin block is custom fit to each plate along what is known as the plate flange. The tuning pins holes will be drilled into the block at a 5-7° angle away from the strings. The reasoning behind this is that the tension of the string when brought up to pitch will exert a pull on the pin. If the pin were straight up and down or leaning forward, the pin would be pulled *out* of the block. Because the pin leans backward, it is actually held securely *in* the block by the tension. Assuming there are no plate bushings present, as was the case on a recent rebuilding project we had, the pin hole is started toward the rear of the opening. Even after the strings are brought up to pitch, the position of the pins will be well away from the front of the hole.

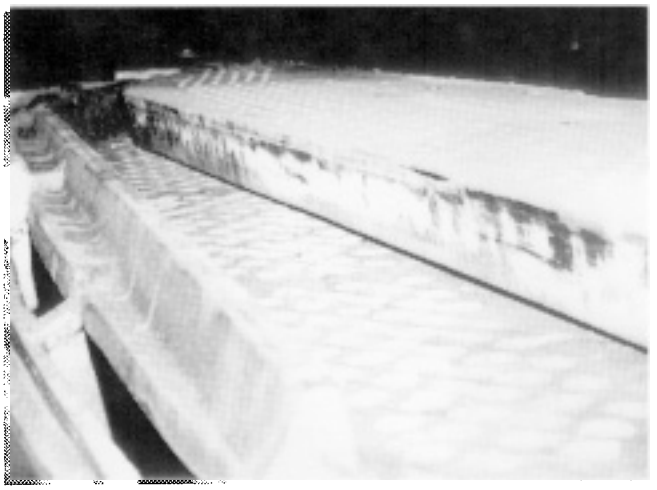
The fit of the pinblock to the plate flange is very important since, as tension is put on the strings, a poor fit will cause the pinblock to pull forward. The fit must be accurate all along the length of the flange or even a small section, poorly fit, will pull forward. We are not sure of how small a section could be affected, so it is best to get a good fit everywhere.

The following pictures show a method for fitting the block using a graphite and water solution painted onto the flange, making the block contact the flange and show the high spots in black. Carpenter's chalk can be used if you prefer blue. As the high spots are removed, the fit gets better and better. We test the fit along the bottom of the block with a thin metal probe and try to eliminate all places where the probe fits in between block and flange.

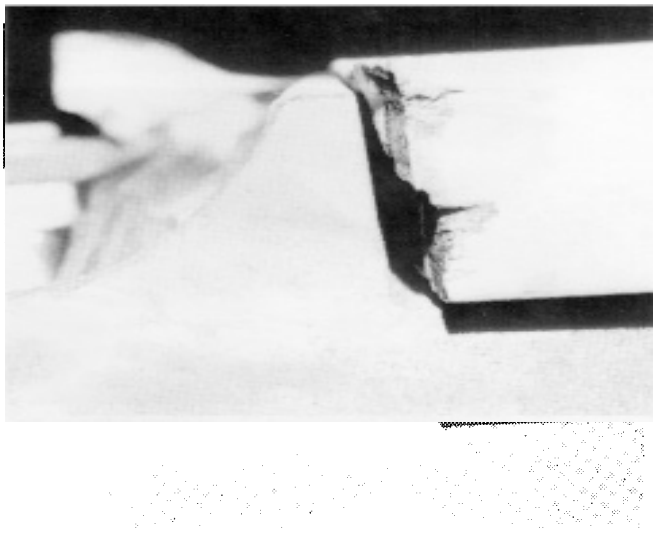
However, this test — which can be done to a fully strung piano during an evaluation — showed a good fit on a piano that was recently in our shop. The failure of the piano to stay in tune and the position of the pins, leaning against the front of the plate holes led us to recommend a new block which was the correct decision, but "why?" was not evident until the old block had been removed and we investigated the fit of the block to the flange. The fit appeared very good between block and flange.



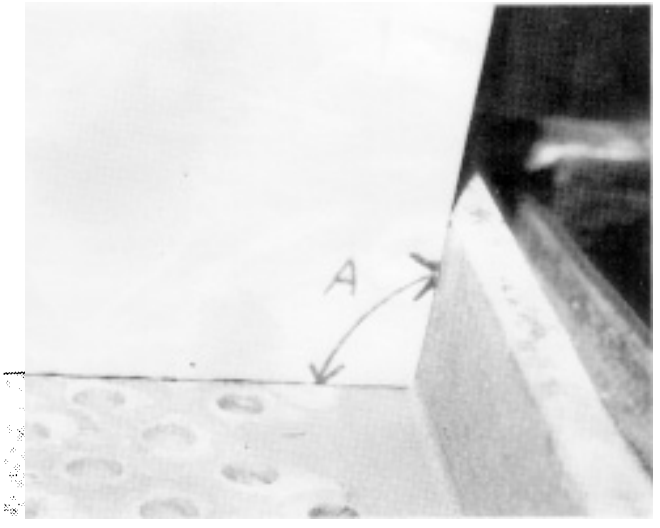
With the tension off the strings, however, the block has sprung away from the flange in the bass area. This caused a very *unstable bass tuning. The thick, short screws through the plate, fixing the position of the block under the plate, apparently do not completely eliminate this springing motion.*



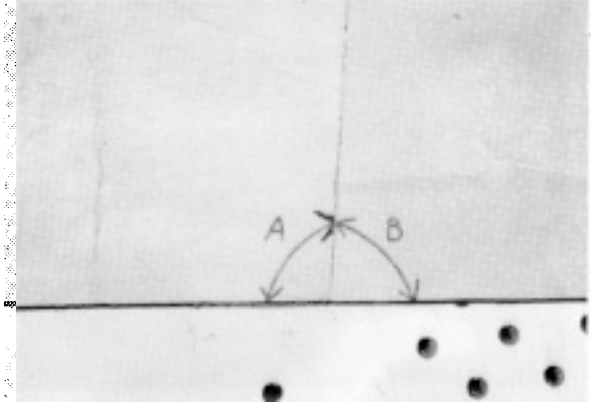
Even more interesting is the manufacturer's own fit, shown in graphite, that indicates the block was tight only along the bottom. *(In this picture, as in all the ones that show the block and plate positioned upside down as it is when we work on them, the top of the block is really the bottom.)*



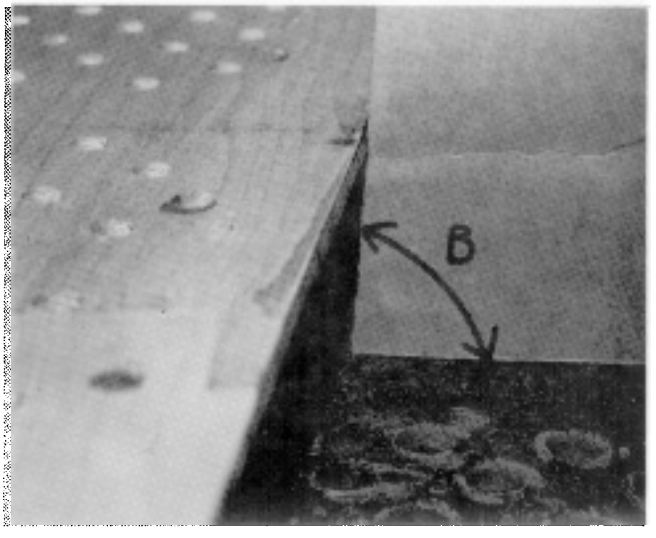
A side view shows that although the bottom of the block touches the flange, there is a substantial amount of space where they do not touch. When tension is put on the strings, apparently the block pulls forward because of the poor fit. Symptomatic is the tuning pins creeping toward the front of the pin hole in the plate, even though the pins are tight and able to be tuned.



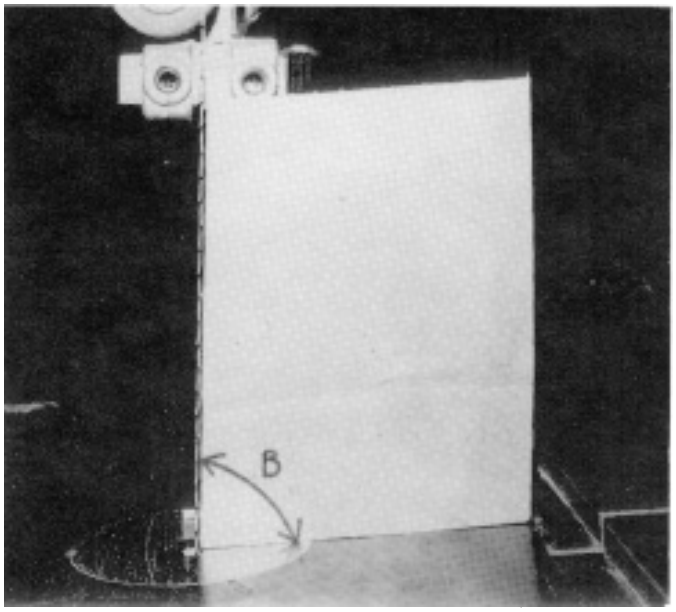
We cut a cardboard pattern to match the angle of the plate flange and called it Angle A.



The complementary, Angle B, should represent the angle at which the pin block is cut.



As was suspected, the original pinblock was cut nowhere near the correct angle.

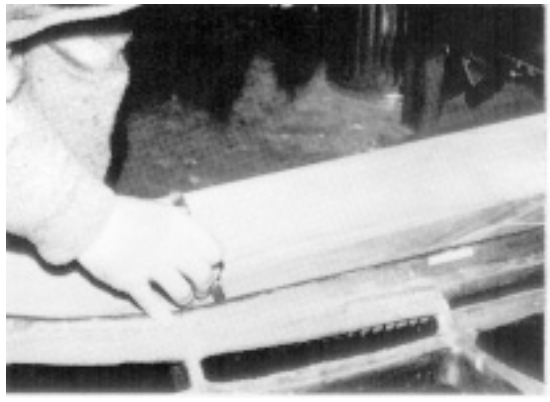


To cut a new pinblock, the band saw table is tilted to produce Angle B.

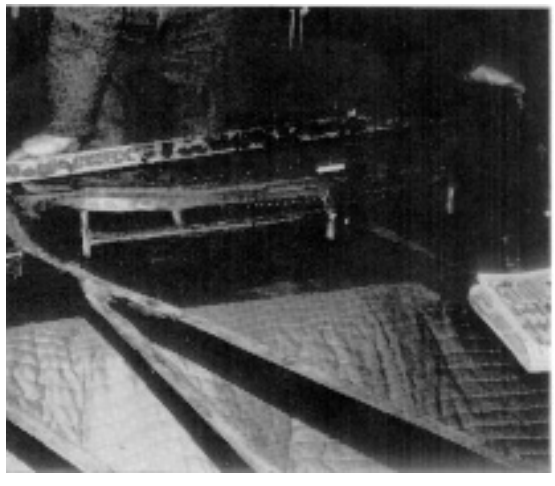
The fitting begins by brushing on a solution of graphite and water. Incidentally, when the fitting is completed, we wash all graphite away so that no stray graphite finds its way into the newly drilled tuning pin holes in the block.

After definitely positioning the block left and right on the plate, taps with a hammer will ensure transfer of the graphite to high spots on the block.

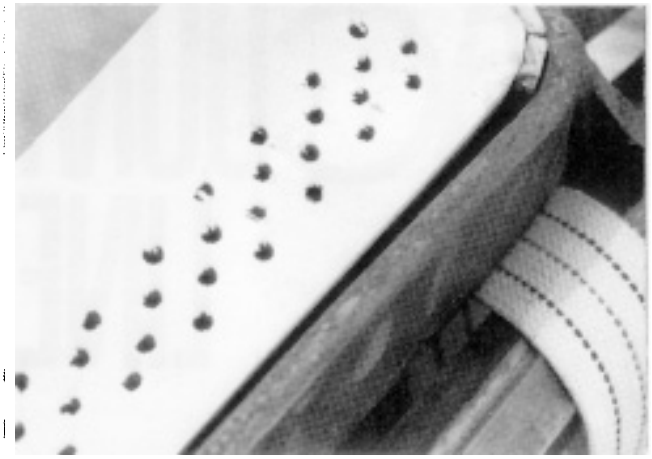
Using a rasp, file, draw knife and/or belt sander, the high spots are taken away. Care is exercised so that the fit is good all along the left-to-right part of the block and top-to-bottom of that area. Furthermore, the block should not rock on the webbing (where the tuning pin holes are drilled in the plate).



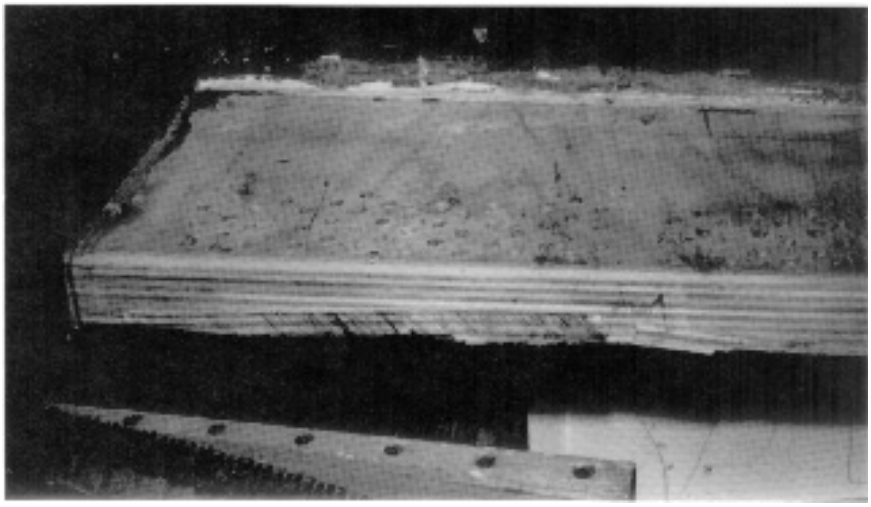
An indication of good fit at the bottom edge — but only the bottom edge — is if a thin metal probe does not fit between block and plate flange.



A well-fit block will show much black at the final fitting.



Another — completely different — piano arrived in our shop with a new pinblock recently installed. A Piano Technicians Guild colleague had been called upon to service the piano and knew something was not right with the new pinblock. Wedges were used to "fit" the block to the plate.



Strips of wood were used in this abhorrent pinblock fit. There is nothing good to say about this job that cheated the customer and forced the tuner following this work to declare the piano a disaster, as it was.

VACUUM LINE

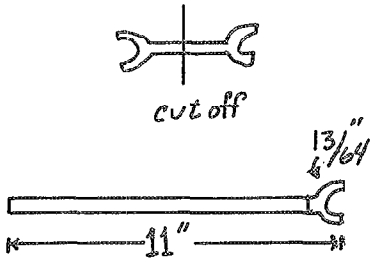
Raye McCall

Several bits of information have come my way in recent days. To all those who have contributed, a very hearty and sincere "Thank you." Keep it up! Most of the time I can use all that is received.

Christmas just past afforded us an opportunity to be in another part of the United States, where they have snow and temperatures much different than ours. It also provided me a chance to meet with some technicians and automatic musical instrument collectors. During this very enjoyable social experience, I learned some things which disturb me very much.

It was brought to my attention that there are those around the country (technicians and others) who are aggressively removing pneumatic player actions from pianos. WHY?? Does it give you a great deal of satisfaction to destroy something which can be a tremendous source of enjoyment to someone? Or maybe you are filled with elation over the fact that the surgery you are performing has reduced your victim to a small fraction of its worth, had you left it alone? I can think of no logical or sensible reason to do such a thing. Does your lack of understanding of the player system justify what you are doing? If so, it is not too difficult to learn something about it, and thereby develop an appreciation for the player piano, and all that it is capable of doing.

One of the Guild men in San Diego has submitted information about a tool he designed for use in adjusting capstan screws in player pianos. Purchase a 13/64 open end wrench. Also from the nearest hobby or model shop, obtain a ten inch length of rectangular brass tubing ⅛" x ¼". You then cut off one end of the wrench. Insert the cut end into the brass tubing. It should be a tight fit, but if it is not, the wrench can be secured in the brass tubing by means of either eopxy or a rivet.



Gerald Foye of Lemon Grove, California has sent a letter in which he included some service tips. In pianos (players or otherwise) where you have a rinky-tink or mute rail, do not set the let-off as close as you normally would. If you do not make this suggested extra allowance, you may find you have blocking hammers when the rail is in the down position.

The Aeolian players have a rinky-tink rail, and there are soundboard buttons placed at each end, between the end of the rail and the case. You have no doubt already made the discovery that these buttons are not secured. When you put them back in, glue them in place so they will not play hide-and-seek with you the next time. The key up-stop rail on the Aeolians usually fits very tightly over the regulating studs. Gerald suggests that we enlarge the holes just a bit, so it is easier to remove and replace this rail.

On the subject of pouches, I have, in the past, touched very briefly. There is more which needs to be said, and so Kenneth Kajkowski from Great Falls, M ontana, sent a letter with some valuable thoughts and information about pouches. Kenneth addresses the discussion of pouches from an authoritative vantage point. He restores player pianos and reed organs, but also restores pipe organs AND builds new pipe organs.

There are probably volumes which Kenneth could write about the pipe organ industry. Pipe organs work on positive pressure, whereas player pianos work on negative pressure, but both use pouches and valves. The most common material from which pouches are made is leather. The leather is very thin, or lightweight, and is sometimes called a "split". This is because it has been split, or peeled away, from another layer. Since leather is derived from animal skins, it is porous. Before making pouches from the skin you buy, you should first examine it, to determine its porosity. This can be done by holding it up to a very bright light, or stretch it taut over a light top table.

Another material from which pouches were made is called zephyr skin. This is also an animal product, but it is not porous. Zephyr skin is made from intestines, and it is absolutely airtight. If you take a player chest apart,

and find zephyr skin pouches, they will probably not need replacing. But do not take anything for granted, test them by the suck tube method. Should it be found necessary to replace them, I would suggest you use the same material in replacing them, because in manufacture the bleed size is made differently because of the air-tight quality of the Zephyr skin pouches.

When you have removed all the pouches, it will be very obvious what you should do next. You will no doubt find a collection of dirt and lint in the pouch cavities. Be sure that you do a thorough job of cleaning it all out. In making the cleanout, be very careful that there is no debris of any kind left behind the bleed. Sometimes this is difficult to check, but it is so very important, because it takes such a small particle to stop the opening in the bleed, and then you have a valve which will not function properly. When the cleanout has been done, the wood must be sealed before the new pouches are made and installed.

In our shop, we cut the pouches using an Arch punch on a piece of hardwood, end grain. A piece of lead would be even better, for the sake of the punch. Our pouches are cut larger in diameter than the cavity, to allow for gluing surface and pouching material. PVC-E is the glue which we use for securing the pouches, whether they are leather or Zephyr skin. With Zephyr skin, when you have finished installing them, the pouch job is done. But not so with leather. It must be sealed.

Several technicians have told me about a silicone material for use in sealing pouches. Some of the men have been using it for many years with much success. Kenneth Kajkowski also recommends it as being a leather preservative as well as sealant. The product name and source of supply is as follows: Silicone Leather Conditioner — Part # 6001 from Organ Supply Industries, P.O. Box 1165, Erie, PA 16512. The price is $9.50 per quart.

There is another material on the market being promoted for use in making pouches, polyethylene. It is transparent, very thin, and absolutely air tight. We have used it in two players, which we restored, and about a year later we had to open the chests again, and install a complete set of leather pouches. I have also been told of similar experiences by other technicians.

If when you started into your repouching job you observed small fibre discs attached to the pouches, I would strongly suggest that these be reinstalled on the new pouches. Install them carefully so that you locate them in the center of the pouch. There are some valves that will not function properly if the little disc is not located exactly in the center.

One final word on the pouch subject. If you are working with the kind of a player where the pouchboard is one-half of the chest, be very careful about the gasket you put on. First of all, the thickness is critical, and it must, of course, be capable of forming a complete seal all the way around. We have found that 1/16" cork-neoprene does a very adequate job of filling nearly all of our gasket needs, and because it is man-made, the thickness is uniform — another plus factor. □

After Touch

David W. Pitsch

50 POINT GUIDE TO GRAND REGULATION

PART VIII

In part VII of the After Touch series on grand regulation we discussed the two methods of regulation for grands, the Dip and Blow Priority. Now that we know the differences between these two methods, two decisions must be made before Section IV The Touch can be begun. The first decision is what procedure to use to accomplish the regulation process. The other decision, depending upon which Priority method was chosen, is to determine the correct measurement for the dip or blow. Once these two decisions have been made, the remainder is a piece of cake. Without these two decisions, regulation becomes a long, hard task with lots of wasted time.

Let us look at some of the many grand regulation procedures that are available to choose from. This list is by no means all inclusive, and just because a certain procedure has been omitted from this list does not infer anything about its relative merits and value to us.

The five procedures listed on the left are Dip Priority, the five on the right are Blow Priority. In viewing this chart you will notice that some procedures have more steps than others. But pay more attention to the order in which these steps are listed. For instance, in procedure #10 the whippens are aligned to the knuckles as step number three. But in step number seven the hammers are aligned to the strings, making realignment of the whippens necessary. Other procedures listed have similar mistakes. I would certainly modify the order of some of these procedures to eliminate such needless doubling back.

If you were to regulate an action, which of these procedures would you choose? Should you select the one that is from the factory manual for the brand of piano being worked upon? If so, then each time you regulated a different brand of piano you would use a different procedure! Needless to say, this is awkward. Or should you select a procedure written by your favorite author to use on all brands of pianos? Chances are that your author's procedure is different from what the manufacturer calls for, and may not be as detailed as the factory manual. As an example, some pianos have an auxiliary whippen spring. If you did not know this, and the procedure you were using doesn't mention it, you would probably overlook it. Well then, should you select the procedure that is the most detailed? I don't believe so. Just because it has 125 steps doesn't mean that it is better than one with 50 steps!

How do you decide upon a procedure? Obviously you want the one which is easiest and fastest for you. People differ in their abilities and knowledge. What works best for one technician may be awkward for another. I suggest that everyone make up their own procedure to suit their own needs. In creating your own, remember that the order of steps must be logical so that the minimum of doubling back occurs.

As a help here, consult the Grand Regulation Chart which appeared in the June 1980 AFTER TOUCH article. Naturally you will want to include those steps such as reshaping hammers and rebushing keys that are normally done when regulating an action. Every step should be in a convenient order to go along with how you regulate. Do you bench regulate or do you regulate at the piano, or a little of each? Once you have drawn up your own procedure, drop a copy in the mail to me, I would like to compare them and possibly publish them in future After Touch articles. Please include an explanation of why you prefer that sequence over another.

Now that the procedure has been decided upon, next is to decide what measurement to use for the dip or blow. Let us take the example of a Blow Priority method first. Looking at the Piano Technicians Guild Piano Action Handbok, I see many different measurements for blow for a grand piano. They range from the normal 1¾" and 1⅞" as used on most American pianos, to 2" (Sohmer) and to the metric measurements. For those without calculators, 45mm = 1.77" or very close to 1¾". Likewise, 48mm = 1.89" or very close to 1⅞". Be aware that some of these measurements listed in the Piano Technicians Guild book are different from what the manufacturers state in their manuals. Also be aware that when the pianos are made, the factory may or may not use these specific measurements. One reason why is the varying thicknesses of grand piano plate castings.

Remember that these specifications are for brand new pianos. As an action becomes worn, compromises must be made. It is not feasible to replace a perfectly good set of hammers just because they are starting to get worn! So how does one decide what blow distance to use? All that I can say is to try sample keys, maybe one in each section of the action, and adjust the blow within tolerances to create the correct aftertouch (assuming that the other steps are properly regulated on these sample keys). If the blow distance must be altered beyond tolerances, then maybe the action needs to be repaired or rebuilt before it can be regulated.

Taking now the example of the Dip Priority method, your task is no easier. Many technicians say that the dip should be ⅜". This measurement is supposed to be valid for all grands. But is it? The Piano Technicians Guild handbook lists not only ⅜" (.375) for dip, but also 13/32" (.406), 7/16" (.4375), 9mm (.355), 9.5mm (.374), 9.66mm (.381), 9.8mm (.386), 10mm (.394), 10.2mm (.402), and 10.5mm (.414). I have had technicians argue that the key dip should never be altered. Well, believe me, if the dip on a concert grand is set at ⅜" and the artist complains that the

GRAND REGULATION PROCEDURE

DIP PRIORITY *BLOW PRIORITY*

1	2	3	4	5	6	7	8	9	10
TIGHTEN SCREWS	BED KEYFRAME	TEST PEDALS	TIGHTEN SCREWS	TIGHTEN SCREWS	KEY HEIGHT	PLATE SCREWS	BLOW	TIGHTEN SCREWS	EASE KEYS
EASE KEYS	EASE KEYS	ALIGN HAMMERS TO STRING	BED KEYFRAME	CLEAN	BLOW	CLEAN	STRIKE POINT	EASE KEYS	CENTERS
CENTERS	SPACE KEYS	SHIFT PEDAL	EASE KEYS	RESHAPE	LET-OFF	ACTION SCREWS	SPACE UNISONS	KEY BLOCK	ALIGN WHIPPENS
BED KEYFRAME	LEVEL KEYS	LET-OFF	CENTERS	REPAIR	DROP	DAMPER SCREWS	ALIGN HAMMERS TO STRING	BED KEYFRAME	ALIGN JACK
TRAVEL	DIP	RINGING DAMPERS	TRAVEL	BED KEYFRAME	DIP	EASE KEYS	LOST MOTION PEDALS	CENTERS	JACK HEIGHT
ALIGN HAMMERS TO STRINGS	ALIGN ACTION	DAMPER LIFT RAIL	HAMMER ANGLE	SQUARE/ SPACE KEYS	BACKCHECK	BED KEYFRAME	DAMPER FOLLOW	ALIGN HAMMERS TO STRING	BED KEYFRAME
ALIGN WHIPPENS	TRAVEL	DAMPER SUSTAIN	ALIGN HAMMERS TO STRING	LEVEL KEYS	REP. SPRING	ALIGN HAMMERS TO STRING	DAMPER LIFT RAIL	ALIGN JACK	HAMMERS TO STRING ALIGN
LEVEL KEYS	ALIGN HAMMERS TO STRING	DAMPER STOP RAIL	KEY HEIGHT	DIP	ALIGN JACK	LEVEL KEYS	DAMPER LIFT KEY	JACK HEIGHT	TIGHTEN SCREWS
SPACE KEYS	ALIGN WHIPPENS	GUIDE RAIL	KEY SPACE	TRAVEL	JACK HEIGHT	RESHAPE	SOSTENUTO	LET-OFF	KEY HEIGHT & LEVEL
DIP	TIGHTEN SCREWS	DAMPER DEPTH TOUCH	DIP WHITE KEYS	ALIGN HAMMER TO STRING	HAMMER REST RAIL	ALIGN JACK	LET-OFF	ALIGN WHIPPENS	BLOW
JACK ALIGN	SPACE JACK	GLIDE STUDS	ALIGN WHIPPENS	SHIFT PEDAL	KEY STRIP	JACK HEIGHT	DROP	BLOW	LET-OFF
JACK HEIGHT	CENTERS	BED KEYFRAME	ALIGN JACK	ALIGN WHIPPENS	DAMPER LIFT RAIL	REP. SPRING	KEY HEIGHT	SPACE KEYS	DROP
LET-OFF	REP. SPRINGS	LEVEL KEYS	JACK HEIGHT	ALIGN JACKS	DAMPER STOP RAIL	BLOW	EASE KEYS	SQUARE KEYS	DIP
BLOW	JACK ALIGN	KEY STOP RAIL	BLOW	JACK HEIGHT	SOSTENUTO	LET-OFF	SQUARE KEYS	KEY HEIGHT	SQUARE BACKCHECKS
HAMMER STOP RAIL	JACK HEIGHT	EASE KEYS	LET-OFF	BLOW	DAMPER PEDAL	DIP	SPACE KEYS	DIP	BACKCHECK DISTANCE
DROP	BLOW	SPACE KEYS	DIP BLACKS	HAMMER REST RAIL		DROP	ALIGN JACK	BACKCHECK	REP. SPRING
BACK-CHECK	LET-OFF	DIP	DROP	LET-OFF		BACKCHECK	JACK HEIGHT	REP. SPRING	GUIDE RAIL
REP. SPRING	DROP	STRIKE POINT	AFTER-TOUCH	DROP		DAMPERS	DIP	DROP	DAMPER LIFT RAIL
REP. STOP HOOK	AFTER-TOUCH	HAMMER SQUARED TO STRING	BACKCHECK SQUARE	SQUARE BACKCHECKS		SOSTENUTO	BACKCHECK	GUIDE RAIL	SQUARE DAMPERS
KEY STRIP RAIL	BACK-CHECK	SOFT PEDAL VOICE	BACKCHECK DISTANCE	BACKCHECK DISTANCE			KEY STRIP	DAMPER TRAVEL	LOST MOTION PEDALS
DAMPER SEAT	DAMPER SCREWS	FAULTY/ RUSTY STRINGS	REP. SPRING	REP. SPRING				SOSTENUTO	SOSTENUTO
DAMPER RISE	IMPROPER DAMPING	CENTERS	KEY STRIP RAIL	KEY STRIP RAIL				LOST MOTION PEDALS	DAMPER STOP RAIL
GUIDE RAIL	DAMPER LIFT KEYS	NOISY KNUCKLES	GUIDE RAIL	DAMPER LIFT KEY				DAMPER STOP RAIL	
DAMPER LIFT KEY	DAMPER LEVEL	HAMMER CORES THINNED	DAMPER LIFT KEYS	DAMPER STOP RAIL				KEY STOP RAIL	
DAMPER LIFT RAIL	SOSTENUTO TABS	BLOW	DAMPER PEDAL LIFT	DAMPER LIFT RAIL				VOICE	
DAMPER STOP RAIL	SOSTENUTO ROD	TRAVEL	DAMPER PEDAL ADJ.	DAMPER PEDAL					
SOSTENUTO	DAMPER STOP RAIL	DROP	DAMPER PEDAL STOP	SOSTENUTO					
VOICE	SOFT PEDAL	AFTER-TOUCH	DAMPER STOP RAIL	STRIKE POINT					
	DAMPER PEDAL	DRUM OFF BACKCHECK SQUARE	SOSTENUTO						
	RESHAPE	REP. SPRINGS	SOFT PEDAL						
	TUNE	ALIGN JACKS							
	VOICE	JACK HEIGHT							
		ALIGN WHIPPEN							
		LUB KEY FRAME							
		WEIGH-OFF							

dip is shallow for him,, you had better change it! This can often be the case with foreign artists, because they are used to a slightly deeper key dip. A technician who insists upon a ⅜" dip would also run into big problems if he worked for instance for a Kawai dealer. The Kawai factory manual specifies 10mm (.394", ⅜ = .375) for their verticals, 10.5mm (.414") for their 7'4" and smaller grands, and a whopping 11mm (.4334") for their concert grand!

Just as in selecting the proper blow distance, to select the correct key dip, first start with the measurement specified by the manufacturer. However, if this measurement when tried on sample keys does not conform to either standards or to the liking of the pianist, then by all means, change it. I would far prefer to adjust the blow or dip on a piano to make an artist happy than to alter it in a way that is permanent, such as in voicing. Either the dip or the blow can both be reset easily later, because they both should be changed equally across the keyboard from what they previously were. Simply reverse the procedure used to alter the action, and everything will return back to what it was.

In conclusion, I would like to state some limits within which it would be acceptable to alter the dip and blow. I would never alter the dip much over .025" beyond what the manual specifies for that piano. Likewise, I would never alter the blow over about ⅛" to 3/16" from the factory specifications. Rather than go beyond these limits I would prefer to replace the hammers, reround the knuckles or replace them, or to repair or replace the whippen cushion felts.

Reader Feedback

NATIONAL
Piano Manufacturers Association
OF AMERICA, INC. 435 North Michigan Avenue • Chicago, Illinois 60611 • Tel. 527-5494

Members
Aeolian Corporation
Amsco Wire Products Corporation
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Conover-Cable Piano Company
The Cornwall & Patterson Company
Currier Piano Company
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Mapes Piano String Company
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Chas. Pfreimer, Inc.
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Standard Piano Hammer
Steinway & Sons
Joseph A. Vogt Piano Supplies
The Wickham Piano Plate Company
Winter & Company
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The Wurlitzer Company
Yamaha International Corporation

February 17, 1981

Mr. Don L. Santy
Executive Editor
The Piano Technicians Guild, Inc.
113 Dexter Avenue North
Seattle, Washington 98109

Dear Don:

Just wanted to take a moment to write to you and tell you that I think the Piano Technicians Journal is getting better and better in terms of format layout and general presentation!

It's easy to read, and I'm sure becoming increasingly valuable to all members of the Piano Technicians Guild!

Congratulations!

With best regards.

Cordially,

George M. Otte
Executive Director

GMO/emi

THOMAS JEFFERSON, KEYBOARD TECHNICIAN

by Jack Greenfield
Chicago Chapter
Piano Technicians Guild

Thomas Jefferson was one of the few presidents of the U.S. that has shown any strong musical inclination. Jefferson, Tyler and Nixon played the violin; Truman and Nixon the piano; Harding the cornet; and Coolidge, the harmonica. Jefferson was an accomplished violinist and had a strong, pleasant singing voice. His interest went deeper than performance alone, and he acquired a technical knowledge of musical instruments. Devoting his attention to the keyboard instruments of his wife, daughters and granddaughters, he became a skillful technician, on a par with the craftsmen of his day.

Jefferson was born in 1743. He received violin lessons at an early age. When he entered boarding school at the age of 14, he was already a competent violinist and he devoted much of his free time to the instrument.

Early in 1760, Jefferson entered the College of William and Mary at Williamsburg. During his two years at William and Mary and in the years as a young lawyer in Williamsburg thereafter, Jefferson was very active musically. Another Virginia fiddler he met was Patrick Henry. Jefferson and Henry became members of a musical group which included other socially prominent amateur musicians and weekly played chamber music concerts at the governor's mansion in Williamsburg.

Jefferson's musical taste covered the entire range from classical to musical plays to country fiddle music which he played at social functions.

Jefferson's deep musical interests were an important factor leading to his marriage to Martha Wayles Skelton, daughter of John Wayles, a prominent Virginia lawyer. Martha played keyboard instruments and guitar. In 1771, the year before their marriage, Jefferson wrote to London to order a clavichord as a gift for Martha. Soon afterward, after seeing a new fortepiano, he changed his order to such an instrument.

Jefferson's correspondence gives a description of the type of instrument he desired but there are no records on the purchase in 1771 of his first piano.

The Jeffersons settled at Monticello after their marriage in 1772. Jefferson served in the Virginia legislature until 1775 when he left to take a leading part in the movement toward independence. After the Revolutionary War had started, he resigned from Congress and returned to the Virginia legislature.

Jefferson became governor of Virginia for two years beginning in 1779. At this time, several paroled British and German officers who were taken at the Battle of Saratoga settled near Monticello. Some of these officers with interest in music became friends of Jefferson and visited Monticello regularly. Jefferson's account books contain an entry showing the sale of his piano in 1779 to Major General Friederich Adolph, Baron Von Riedesel and it is believed General Riedesel took the piano when he returned to Germany.

The death of Jefferson's wife in September, 1782, was a severe shock to him and he withdrew from public life for about a year until he was elected to Congress. He took his older daughter, Patsy, with him when he settled in Philadelphia for Congressional service. He rented a clavichord and arranged for Patsy to have music lessons from John Bently, the prominent English harpsichordist, who also had settled in Philadelphia.

Jefferson was given the assignment of assisting John Adams and Benjamin Franklin in the peace negotiations and arrived in France with Patsy in August, 1784. Jefferson took complete advantage of every musical opportunity he could find. He rented a piano for Patsy, ordered a Kirkman harpsichord from London, bought a violin, a guitar, strings, and stacks of music. He frequently attended musical functions and met many prominent performers and composers, including Handel, Haydn and Mozart.

Jefferson returned to the United States in 1789. He left most of his furniture behind but shipped Patsy's harpsichord to Monticello. Patsy still left it there after she married Thomas Mann Randolph in the following year.

When Jefferson began to serve as Secretary of State in Washington's cabinet, he obtained a spinet for his younger daughter, Maria, who was with him during his later residence in Philadelphia. Little is known about this instrument.

Jefferson became Vice President in 1796; he bought a second Kirkman harpsichord and gave it to Maria in 1798, one year after her marriage to John Wayles Eppes. Maria also left her harpsichord at Monticello.

In spite of his very active political life campaigning for the presidency, Jefferson now became interested in the new type of "portable grand" upright piano designed by John Isaac Hawkins of Philadelphia. In early 1800, Jefferson paid Hawkins $264 for such an instrument to be delivered to Monticello. Jefferson kept it for two years and then sent it back to Hawkins because it could not stay in tune. It cost Jefferson $40 more for this shipment. It appears that his total investment was a complete loss, as he received no replacement or refund from Hawkins.

The next instrument acquired at Monticello was a small Astor and Company five-and-a-half octave square piano of the type this company built between 1799 and 1815. The Astor piano has been restored and is now on display at Monticello. Unfortunately, there is no documentation on this instrument.

After Jefferson retired from the presidency in 1809, he returned to Monticello and devoted himself fully to his varied interests: music, architecture, chemistry, law, philosophy, religion, horticulture and agriculture. He paid much atten-

tion to the musical education of his granddaughters, the children of Patsy Randolph. Two of the granddaughters, Ellen and Virginia, were musicians and played the harpsichord.

The last piano Jefferson bought was for his granddaughter, Virginia, who had just married Nicholas Trist. His other musical granddaughter, Ellen, was the wife of Joseph Coolidge, who owned a new Broadwood grand imported from England. The piano selected for Virginia was an instrument built by Currier and Gilbert of Boston. It reached Monticello in March, 1825.

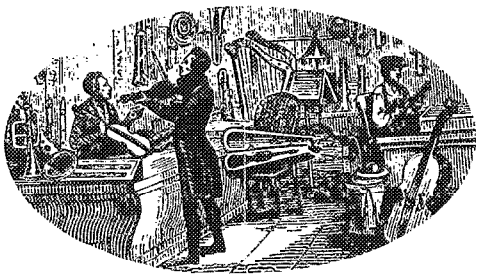
Thomas Jefferson died July 4, 1826 and the family closed Monticello in November of that year. In the following years, the Trists took their piano with them when Nicholas began his career working in the State Department. His first job was in Washington. In 1835 he was appointed consul assigned to Havana, Cuba. The piano was sent back to Currier for reconditioning and then on to the Trist's home in Cuba. In 1839 the Trists had to move again, this time to France, but the piano had to be left behind because it was no longer practical to ship it.

Jefferson's correspondence with instrument technicians and other writings indicate he knew as much about keyboard instruments as most contemporary American craftsmen. He always ordered extra strings, tuning tools and other accessories he might need when he purchased an instrument. He usually tuned or repaired his keyboard instruments himself.

Jefferson left a huge collection of music, including manuscripts and notes he had written. Most of this material is deposited either in the University of Virginia Library or the Monticello archives. The collection contains some sheets showing the pattern he followed in tuning. One record of his pattern was written by Jefferson on the back of a page in a volume of minuet music. (U of V Library, Manuscripts Department, Monticello Music Volume 1, #3177-a, Box no F63155 folder heading, Tuning, Harpsichord) Due to aging the printed music has bled through to the back but the pattern in the handwriting of the man that wrote the Declaration of Independence is plainly as follows:

G_3 - G_4, G_4 - D_4, D_4 - A_4, A_4 - A_3, A_3 - E_4, E_4 - E_5, E_4 - B_4, Test: G_4 - B_4; B_4 - B_3, B_3 - $F\#_4$, $F\#_4$ - $F\#_3$, $F\#_4$ - $C\#_5$, $C\#_5$ - $C\#_4$, $C\#_4$ « $G\#_4$, $G\#_4$ - $G\#_3$, Test: $G\#_4$ - E_4; G_4 - C_4, C_4 - C_5, F_4 - G_5, F_4 - F_5, F_5 - B^b_4, B^b_4 - B^b_3, B^b_4 - E^b_4, E^b_4 - E^b_5, Test: E^b_4 - G_4; $F\#_4$ - $F\#_5$, G_4 - G_5, $G\#_4$ - $G\#_5$, F_3 - F_4

Reference: Helen Cripe, *Thomas Jefferson and Music* (Charlottesville, University Press of Virginia, 1974). □



In Memory

AUBREY WILLIS, 66, director and founder Aubrey Willis School of Piano Tuning and Repairing, Orlando, Florida, passed away on February 25, 1981. Aubrey had been ill for the past several months following open heart surgery.

Aubrey Willis has often been referred to as the best known piano tuner-technician in America. Technicians throughout America and Canada met him personally as he traveled into all 50 states and throughout Canada as Piano Technicians Guild International Field Secretary. He left the employ of the Guild to devote the rest of his life to properly training people for the piano service profession.

Mr. Willis received the highest awards available in the profession: he was awarded the first Golden Tuning Hammer ever given by the Piano Technicians Guild and he was inducted into the first Piano Technicians Guild Hall of Fame. He held many high offices in the Guild and was honored by the profession on numerous occasions.

In addition to being a superb craftsman, Aubrey Willis will be remembered as a modest, kindly gentleman who enjoyed sharing his knowledge and helping others to master the intricate workings of the instrument and profession he loved.

—Robert E. Allan

"Let your light so shine that it be a beacon to others." Surely these words best describe the life of Aubrey Willis.

These years since becoming a member of the Piano Technicians Guild he spent in close harmony in the betterment of our Guild.

Each word spoken, each letter written and each trip made was aimed in helping a fellow member, the very purpose of the Piano Technicians Guild.

If Aubrey had had a middle name it would have been GIVE. His legacy to us is just that. Hundreds on hundreds can take part knowing that he gave his all helping to make us better tuner-technicians, understanding the rights of others and helping to make our organization the brotherhood it is today.

Aubrey's body lies in a beautiful Forest Lawn near a citrus grove, but his spirit of fair play will be with us forever.

Let us console ourselves in knowing that our loss is heaven's gain. — Jess Cunningham □

CARL EDWIN WICKSELL, 65, died on January 24, 1981, after a massive stroke earlier in the month. Born in Thompson Falls, Montana, he grew up working closely with his father, a builder and master cabinetmaker. This laid the groundwork for his many abilities and perfectionistic approach to details.

In Seattle in the late 40's, he learned to tune and repair pianos under the guidance of a member of the American Society of Piano Technicians and became active as a member himself. Though his many talents and interests took him into other fields of work for some years, an enduring interest in pianos brought him back into sales and service with large piano dealers in Ft. Lauderdale, Florida, in the early 60's.

He became a member of the Guild in 1966 and then went into business for himself. He was very enthused over the aims of the Guild and wholeheartedly supported and promoted it through the years, both within the organization and with his customers. He was Chairman of the Constitution and Parlimentary Committee for two years, Southeast Regional Vice-President for one year, 1974-75, and was nominated for Secretary-Treasurer in 1977.

Carl had a great talent for selling ideas. In 1967, he successfully trained his son, Larry, who joined him in the business. Thus began an active interest in teaching that included a number of private students through the years, educational programs for various chapters, several years as private tutor at the national conventions and classes for the past four years. He also served in the same roles at the Florida state conventions.

A move to central Florida in 1975 onto 2½ acres of woods and the completion in 1976 of a home, brought a dream to reality. An additional goal achieved was the large shop, designed specifically as a teaching facility for private students — as well as giving space for his huge, folding, model train layout, conceived and built in Ft. Lauderdale. His new goal was to reactivate the hobby since he was slowing down in piano work.

For the last three years he enjoyed selling the line of Charles R. Walter pianos, as well as a large number of reconditioned used pianos by the concept of "Selling through Service". Carl steered his life along the path of service to others.

(Courtesy Gladys and Larry J. Wicksell)

1981 TECHNICAL INSTITUTE UPDATE

by George Defebaugh
1981 Institute Director

Since we learned at a recent N.A.M.M. Show that player sales are increasing all over the country, we thought this would be a good time to bring you some information about the Player Service Classes we have planned for you at the 1981 San Francisco Convention. Even though our own private storehouse of knowledge contained very little on the Player Piano, it was fairly simple to contact three of the recognized experts in the field and VOILA!! We can now offer both specialized and general Player Service Information.

From the Aeolian Corporation we have Bob Snyder who will give you details of player construction right down to the individual components, as well as servicing tips that will save you time and add $$$$$$$ to your income.

From the Long Island-Nassau Chapter we have Norman Heischober's high-level, advanced Player Servicing Class, covering Kimball, Universal and anything in the Aeolian products that Bob Snyder may not have had time to tell you about. Norman will also conduct a "one time" advanced Player Technicians Forum, a 1½-hour get-together to exchange Player information for the "Good of the Order".

And last but not least, Raye McCall (THE LEAK STOPS HERE) with a complete coverage of the Valves and Pneumatic Systems.

A GRAND IDEA... Many Technicians will never rebuild a grand piano, but every Technician in the business will tune some grands and have a definite need to know how to regulate and service one. With the Kimball Grand Regulating Class using Models, Tools, and the expert instructions of Roger Weisensteiner, Eric Johnson and Ray Reuter, you can see and feel what happens when you "get it right."

Another facet of Grand servicing where there is far too little skill and expertise is Damper Installation and Regulation. We think it is such an important subject that we have again separated it from the general class of grand regulation and asked Willard Sims and Jack Krefting to give us the Baldwin three-hour class covering this area. Unless you are already a Grand Damper Expert... don't miss it.

As long as we have drifted along from Player Servicing to Grand Regulating, this is probably a good time to mention the Yamaha class on Aftertouch. Although the Yamaha team of LaRoy, Jack, Kenzo and Joe Dennis cover both grand and vertical actions, we think the high-level theory on display here will go well with the practical approach of the two previously mentioned classes... After all, if you have come this far, why not make it a "GRAND EXPERIENCE"!!

Piano Technicians Guild

24th Annual Convention and Technical Institute
July 6–10, 1981

San Francisco, Everybody's Favorite City

Attending a Piano Technicians Guild Annual Convention isn't all classwork; you can relax with your friends (old and new) and enjoy the many activities planned for you.

EXHIBITS

This year, arrangements have been made for over 30 exhibits by many of the industry's top companies. It will be your oportunity to discuss ideas, problems and possible solutions with the very people most likely to know—the service representatives and company officers of piano manufacturers, supply companies, importers, trade schools, electronic tuning equipment firms and others. This year the exhibit will be located in a more spacious area affording much more privacy for all involved.

BANQUET

Each year the banquet serves as the convention's social highlight. The entertainment planned promises you a wonderful evening! You will be pleased to know that the banquet is being held on Wednesday evening and will be held in the glamorous Continental Ballroom.

REGISTRATION CANCELLATION POLICY

Full registration will be refunded if cancellation is received postmarked no later than June 1st. After this date a 30 per cent cancellation fee will apply to all refunds made prior to July 1, 1981. There will be no refund made on any registration cancelled on or after July 1, 1981.

NONMEMBER SPECIALS

Nonmember registrants who apply at the convention Membership Booth may obtain a $30.00 certificate good on new member application fee when accepted as a Registered Technician, Apprentice or Allied Tradesman. Nonmember spouses may use $6.00 of the registration fee as Auxiliary dues at the Convention.

Fisherman's Wharf

REGISTER NOW

Registration forms with checks attached are now rolling into the Home Office. Your early response will be most helpful in planning for your arrival in San Francisco.

When you make your decision to attend, let us know by your registration and check as soon as possible.

San Francisco

SPOUSE CALENDAR

Sunday — July 5, 1981 (PTG Council in Session)

8:00 am-12:00 n	Auxiliary Center Open
1:00 pm- 4:00 pm	Auxiliary Center Open

Monday — July 6, 1981 (PTG Council in Session)

8:00 am-12:00 n	Auxiliary Center Open
1:00 pm- 4:00 pm	Auxiliary Center Open

(Auxiliary Center open to Members and Non-Members)

Tuesday — July 7, 1981

8:00 am-12:00 n	Auxiliary Center Open
8:00 am- 9:00 am	Auxiliary Board Breakfast
9:30 am-11:00 am	Auxiliary Assembly Two Speakers & Slide Presentation
11:30 am-12:00 n	M A L Meeting
1:00 pm- 4:00 pm	Auxiliary Center Open
1:00 pm- 2:00 pm	Auxiliary Council*
2:30 pm- 4:00 pm	President's Reception*

Wednesday — July 8, 1981

8:00 am-12:00 n	Auxiliary Center Open
9:00 am-10:00 am	Class
10:30 am-11:30 am	Class
1:00 pm- 4:00 pm	Auxiliary Center Open
12:00 n 2:00 pm	Installation Luncheon

Thursday — July 9, 1981

8:00 am-12:00 n	Auxiliary Center Open
9:00 am- 4:00 pm	Tour of Wine Country and Sonoma Village
1:00 pm- 4:00 pm	Auxiliary Center Open

Friday — July 10, 1981

8:00 am-10:00 am	Auxiliary Center Open

All meetings are in California Room except President's Reception in Vista Room & Installation Luncheon in Continental Ballroom 5.

*Activities for members only

MEMBER CALENDAR (Preliminary)

Saturday — July 4, 1981

1:30 pm- 6:00 pm	Registration Open

Sunday — July 5, 1981

9:00 am	Worship service
10:00 am-12:00 n	Council in Session
12:00 n - 6:00 pm	Registration Open
1:30 pm- 5:00 pm	Council in Session

Monday — July 6, 1981

8:00 am- 9:45 am	Chapter Workshop
8:00 am	Complete Institute Office Setup
8:00 am- 6:00 pm	Registration
9:00 am- 4:00 pm	Classroom Setups
10:00 am-12:00 n	Council in Session
1:30 pm- 2:15 pm	Regional Caucuses
2:15 pm- 5:00 pm	Council in Session/Officer Elections
7:30 pm- 9:00 pm	Opening Assembly
9:00 pm-10:30 pm	Exhibit Opening/Ribbon Cutting

Tuesday — July 7, 1981

7:30 am-12:00 n	Exhibits (Drawing)
7:30 am	Membership Services
8:00 am- 6:00 pm	Registration Open
8:30 am-12:00 n	Institute Classes in Session
9:00 am-10:30 am	Board Committee Appointments
1:00 pm- 6:00 pm	Exhibits (Drawing)
1:30 pm- 5:00 pm	Institute Classes in Session
5:15 pm- 6:15 pm	Feminine Technicians Meeting
6:30 pm	Young Technicians Meeting
8:00 pm-10:00 pm	Flea Market — Hawaiian theme

Wednesday — July 8, 1981

7:30 am-12:00 n	Exhibits (Drawing)
7:30 am-	Membership Services
8:00 am-	Registration All Day at Office
8:30 am-12:00 n	Institute Classes in Session
1:00 pm- 6:00 pm	Exhibits (Drawing)
1:30 pm- 5:00 pm	Institute Classes in Session
6:45 pm- 7:30 pm	No Host Cocktail/Reception
7:30 pm- 9:30 pm	Banquet

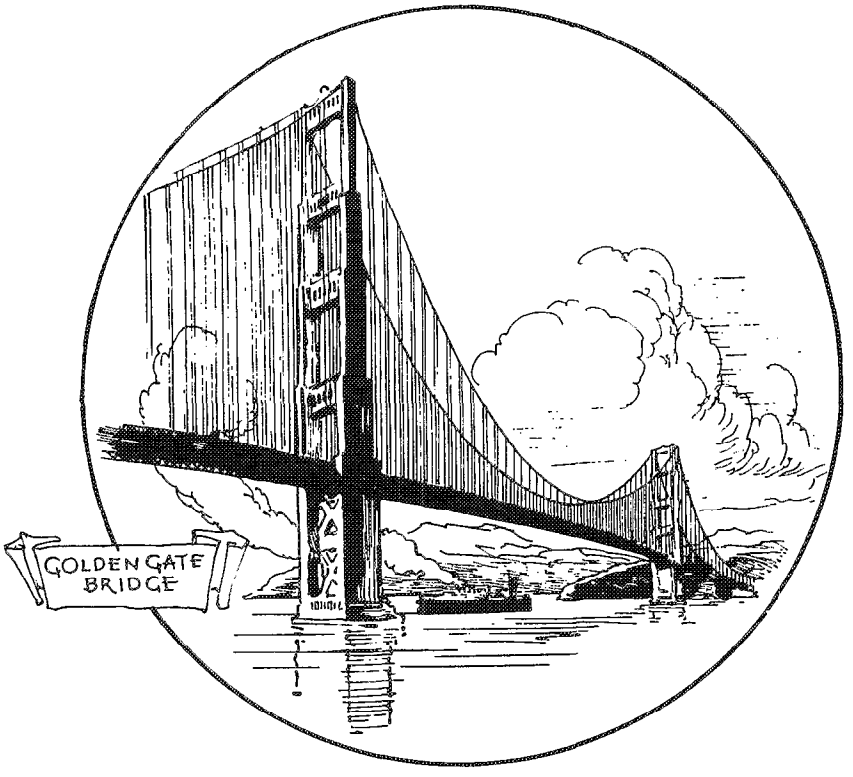
Thursday — July 9, 1981

7:30 am-12:00 n	Exhibits (Drawing)
7:30 am	Membership Services
8:00 am-	Registration All Day at Office
8:30 am-12:00 n	Institute Classes in Session
11:45 am- 1:30 pm	Membership Services Open
1:00 pm- 6:00 pm	Exhibits (Drawing)
1:30 pm- 5:00 pm	Institute Classes in Session
Free Evening	

Friday — July 10, 1981

8:00 am- 9:00 am	Committee Meeting
7:30 am-11:00 am	Exhibit Finale (Drawing)
8:30 am-12:00 n	Institute Classes in Session
12:30 pm- 2:00 pm	Closing Luncheon

Tuning Exams Offered at San Francisco Convention



The new tuning exam will be offered at the San Francisco Convention. Due to the necessarily limited number of times available for testing, scheduling will be done in advance on a first come/first served basis.

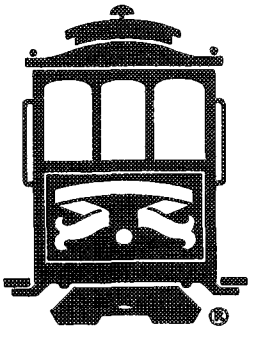
Applicants for membership or reclassification must be cleared by their local chapter first. They must have passed the written and bench exams at the desired classification before taking the tuning test. All chapters should have copies of the "Application for a Tuning Test." This must be filled out in order to set a time for the test.

Send this Application along with $40 examination fee (checks payable to the Piano Technicians Guild) and the coupon below to Ron Berry, 6520 Parker Lane, Indianapolis, IN 46220 for scheduling. You will be sent a time for your tuning exam. Those craftsman members desiring to take the exam as the first step towards Examiner certification may sign up also. There is no fee, and no chapter approval is required in this case.

Those who have passed the exam with 90s and wish to learn how to give exams as the second step toward certification should present themselves at the exam area during the convention and will be assigned to work with an experienced CTE.

The $40 exam fee holds your scheduled time. It can be refunded only if notification of cancellation is given to Ron Berry at least 48 hours ahead of the scheduled time. If demand exceeds time available, names will be kept on a waiting list in the order received. Those on the waiting list who do not receive an examination time will have their exam fee refunded.

Requests for tuning exams must be sent before June 21, 1981 for scheduling at the San Francisco convention.



NAME _____

ADDRESS _____

_____

PHONE (____) _____

PRESENT CLASSIFICATION:

☐ Nonmember ☐ Student

☐ Apprentice ☐ Registered Tuner Tech

☐ Other

Taking exam to become:

☐ Apprentice ☐ Craftsman

☐ Certified Tuning Examiner

Applicants for membership or reclassification send $40 exam fee (checks payable to Piano Technicians Guild) and "Application for Tuning Exam" along with this coupon to:

Ron Berry
6520 Parker Lane
Indianapolis, IN 46220

SAN FRANCISCO HILTON & TOWER

Conveniently centered in the heart of downtown San Francisco's activity, the San Francisco Hilton & Tower is just a block from Union Square beckoning the shopper with high fashion apparel; cable cars clang their way up steep grades then descend for the scenic color of exotic Chinatown and Fisherman's Wharf.

BE A WINNER

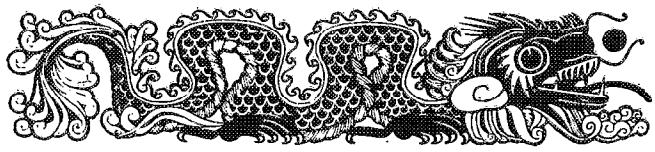
Register early (by April 15th) and be a winner! There will be two free dinners at the San Francisco Hilton Hotel awarded during the Opening Assembly, $100 awarded at the Closing Luncheon, and four nights lodging given at the Wednesday Evening Banquet. (Winner of free lodging must be staying at the San Francisco Hilton and must be present at the Wednesday Evening Banquet.) One drawing ticket will be enclosed in your registration packet if you register early by April 15th.

SPECIAL EVENTS

An event similar to the 1980 special including the "Flea Market" is in the planning stage with a Hawaiian theme. Plan to reserve a table for your Chapter. Details will appear in several issues of the Journal prior to the Convention.

CLOSING LUNCHEON

At the Closing Luncheon you'll bid farewell to retiring Guild officers and welcome their replacements—share in award presentations and say goodbye to friends for another year. This is a "must attend" event that's guaranteed to make you glad you came to "EVERYBODY'S FAVORITE CITY."



AUXILIARY WINE COUNTRY TOUR

The Auxiliary has planned an all-day tour to the wine country and village of Sonoma. You'll leave by bus and travel north to the Pueblo of Sonoma, a landmark of early California days, tour the state's oldest winery and sample its excellent wines. After a special lunch in the beautiful Sonoma Mission Inn, explore the quaint town of Sonoma, its many shops and points of interest, including Mission San Francisco de Solana, founded in 1823. Cost of the tour is $28.00 per person. Please sign up and forward your check to the Home Office right away!

1981 TECHNICAL INSTITUTE

REPEAT CLASSES

AFTERTOUCH IN GRANDS & VERTICALS... The Yamaha team of LaRoy Edwards, Jack Caskey, Kenzo Utsonomiya and Joe Dennis.

VOICING AND TONE REGULATING... with Norman Neblett.

SHARPENING THE TOOLS OF THE TRADE... A "hands-on" class with Joel and Priscilla Rappaport.

VERTICAL REGULATION... (Spinets, Consoles, Studios)... Cliff Andersen, Bob Hill, Bud Corey, Lew Herwig and Larry Talbot of Wurlitzer. Models and "hands-on" experience.

SERVICING THE RHODES PIANO... with Harold Rhodes and Horst Absman.

GRAND DAMPER INSTALLATION... All details of this job and some "hands-on" experience presented and supervised by Willard Sims and Jack Krefting, Baldwin Piano.

SERVICING THE AEOLIAN PLAYER... with player expert Bob Snyder.

HUMIDITY CONTROL SYSTEMS INSTALLATION... Allen Foote and Wendell Eaton.

GRAND HAMMER INSTALLATION... hands-on, with models and all equipment under the guidance of Willis and David Snyder with assistance from Homer Wagman.

GRAND ACTION REGULATION... Roger Weisensteiner and the Kimball Collaboration... complete with models and "hands-on" work time.

TUNING!!! We will not name the Titles and Instructors for these "bread and butter" classes, but we guarantee a "smorgasbord,, selection.

NEW CLASSES

AGRAFFES... Repair, removal and replacement with a new instructor, Paul Bergan.

BASICS OF PIANO TUNING... for the Student and Apprentice, with Leon Levitch.

BRIDGE REPAIRS, Usual and Unusual... with John Bloch.

BUILDING A SUCCESSFUL BUSINESS... Tips of organizing and maintaining a profitable Piano Service Business, Phil Bashaw.

DESIGN AND REPLACEMENT of Grand Piano Keys & Actions... with Frank Stopa, Wally Brooks & the Connecticut Crew.

FRICTION IN THE GRAND PIANO ACTION... The basics that must be attended to before Grand Regulation can begin, with Ed Whitting.

KEY RECOVERING... Ed Solenberger shows you how to build your own machine and recover your own keys.

PEDALS, LYRE AND SOSTENUTO... From the bottom up with Steinway's own Fred Drasche.

PIANO EVALUATION AND APPRAISAL... Ben McKlveen brings you up to date on the "how and why" of this very important part of your business.

REBUILDING THE OLD PLAYER STACKS OR "WHERE THE LEAK STOPS"... A must for all Player Service People, with Raye McCall, author of the Journal column, "Vacuum Line."

TROUBLE SHOOTING THE VERTICAL PIANO... From Casters to Top Hinges with Master Trouble Shooter, Ernie Juhn.

WHAT ARE ALL THEM FELTS FOR?... The answers will be forthcoming from you, the class, or Jim Harvey, Technical Manager, Kawai America Corp.

SPECIAL CLASS

COMPLETE GRAND REBUILDING... Theory, Practical and "Hands-on" with Master Rebuilders Bob Burton, Ken Kadwell and Sheldon Smith.

PRIVATE TUTORING

Both Aural and Visual Tutoring will be available with such outstanding instructors as Newton Hunt, George Morgan, Carl Wicksell, Ruth Ann Jordan and others.

MEMBER REGISTRATION COPY

Name _____
Home Address _____
City _____
State/Province _____ Zip _____
Nickname for Badge _____
(if not the same as above)

☐ Member ☐ Non-Member
☐ Visually Handicapped
☐ Will be staying at the San Francisco Hilton and Tower

Spouse's Name _____
(if attending)
Nickname for Badge _____
(if not the same as above)
Children (names and ages) _____

REGISTRATION CUTOFF DATES
(Cutoff Dates are Firm and Absolute)
Check Boxes and Total

TECHNICIANS

Guild Members

Postmarked by May 1 ..... ☐$ 90.00
Postmarked after May 1 ..... ☐$110.00

Non-Guild Members

Postmarked by May 1 ..... ☐ $175.00
Postmarked after May 1 ..... ☐ $195.00

Private Tuning Tutoring (1½ hours) ..... $ 30.00
☐ Aural ☐ Visual

Grand Rebuilding ..... ☐ $ 30.00

SPOUSES AND CHILDREN

Auxiliary Member ..... ☐ $ 35.00
Non-Auxiliary Member ..... ☐ $ 45.00
Children (15 and under) ..... ☐ $ 5.00
I Plan to Attend ..... ☐ Auxiliary Tea
☐ Auxiliary Luncheon

OPTIONAL FUNCTIONS

Banquet ..... ☐ $ 25.00
Closing Luncheon ..... ☐ $ 15.00
Auxiliary Wine Country Tour ..... ☐ $ 28.00

TOTAL ENCLOSED $_____

Tickets for optional functions must be bought no later than 48 hours before the event.
NOTE: Spouses of Piano Technicians Guild members and their sons or daughters, age 16 or over, may register for Institute classes at Piano Technicians Guild member rate. Guides of visually handicapped technicians may attend classes at no charge.

CUT — CUT — CUT — CUT — CUT

HOME OFFICE REGISTRATION COPY

Name _____
Home Address _____
City _____
State/Province _____ Zip _____
Nickname for Badge _____
(if not the same as above)

☐ Member ☐ Non-Member
☐ Visually Handicapped
☐ Will be staying at the San Francisco Hilton and Tower

Spouse's Name _____
(if attending)
Nickname for Badge _____
(if not the same as above)
Children (names and ages) _____

REGISTRATION CUTOFF DATES
(Cutoff Dates are Firm and Absolute)
Check Boxes and Total

TECHNICIANS

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Postmarked by May 1 ..... ☐ $ 90.00
Postmarked after May 1 ..... ☐ $110.00

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I Plan to Attend ..... ☐ Auxiliary Tea
☐ Auxiliary Luncheon

OPTIONAL FUNCTIONS

Banquet ..... ☐ $ 25.00
Closing Luncheon ..... ☐ $ 15.00
Auxiliary Wine Country Tour ..... ☐ $ 28.00

TOTAL ENCLOSED $_____

DO NOT WRITE HERE

Date Rec. _____ Priority No. _____
Amt. Pd. _____
Cash _____ Check _____ Money Order _____
Chapter No. _____ Member No. _____
Classification _____

Cross Over The Bridge

All New for 1980-1981

This year the booster club has a new format.

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

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

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

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

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

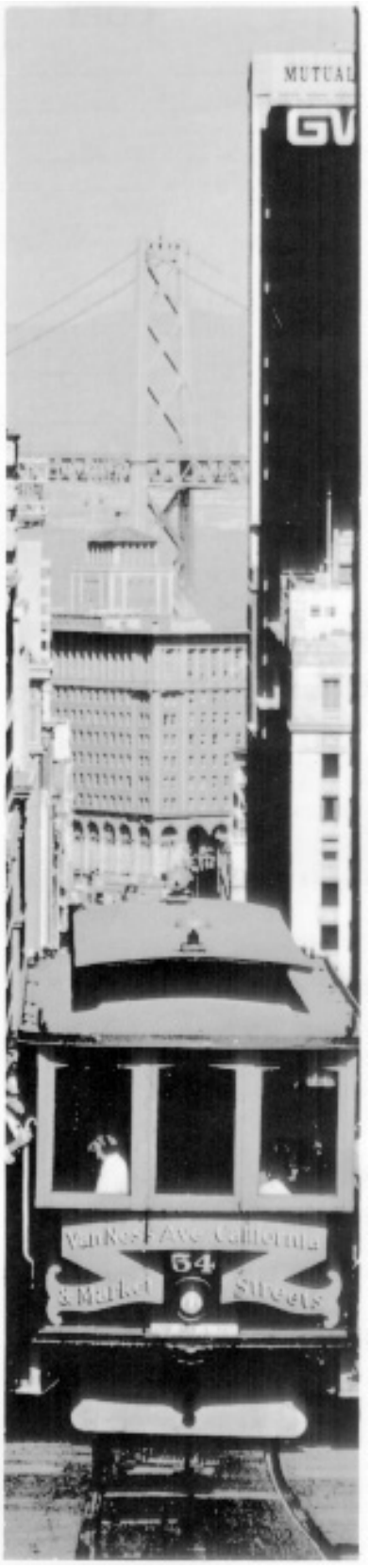
2. Please show your own chapter after your name. Some members sponsor a new member into a chapter other than their own.

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

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

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

	Pts	Mbs
President's Club		
BITTINGER, Dick	17	7
DRAINE, Robert	24	8
MARCIANO, William	15	5
SMIT, Robert	18	6
Restorer's Club		
BITTINGER, Dick		
COLEMAN, Sr., Jim		
DeTAR, Brian		
DUNCAN, David		
FANNING, William		
GOLD, Jimmy		
MENSCHING, Dale		
PREUITT, Ernie		
SPRINKLE, Jack		
WALKUP, Ken		
WEEKS, George		
Booster Club		
ACKMAN, W. H.	3	1
AFFLECK, Don	1	1
ALLEN, Jon	1	1
ANDERSON, Albert	7	3
ASHMORE, Yvonne	1	1
BAIRD, John	3	3
BARRUS, Ralph	3	1
BAUM, Patrick	3	1
BENNET, Wallace	3	1
BERGE, Harry	3	1
BITTINGER, Dick	17	7
BROOKSHIRE, Jerry	1	1
BROWN, Anson J.	1	1
BROWNFIELD, Gary	3	1
BURTON, Robert	1	1
BUYCE, Harold	4	2
CALLAHAN, James	1	1
CLARK, Peter	1	1
CLEVENGER, Wayne	4	2
COLEMAN, Sr., Jim	7	3
COLLINS, James A.	3	1
CONOVER, Lester	3	1
COX, Merril	9	3
CRABB, Larry	3	3
CRAW, Stephen	1	1
CUNNINGHAM, Jess	12	4
DANTE, Richard	3	1
DeARMOND, C. E.	6	2
DEFEBAUGH, George	3	1
DeTAR, Brian	4	2
DRAINE, Robert	24	8
DROST, Michael	6	2
DUNCAN, David	3	1
EDWARDS, Laroy	3	1
EDWARDS, William E.	3	1
ERDMAN, James	1	1
ESMONDE-WHITE, Oliver	6	2
EVANS, Dan	4	2
FANNING, William	6	2
FELTON, Hilbert	10	4
FINGER, Chris	9	3
FLEGLE, Sr., Richard	1	1
FREIDIN, Irving	1	1
FRITZ, Lloyd	3	1
FROST, Jack	6	2
GARLICK, William	3	1
GARMAN, Dale	3	1
GARRETT, Joseph	1	1
GEIGER, James	3	1
GENTRY, Kenneth	3	1



GILLER, Evan ..... 7 ... 3
GOLD, Jimmy ..... 3 ... 1
GOYA, Emily ..... 1 ... 1
GRENNING, Albert ..... 1 ... 1
GULLIXSON, Elisha ..... 3 ... 1
HANSON, Frank ..... 9 ... 3
HARMON, Clayton ..... 3 ... 1
HAUCK, Jack ..... 1 ... 1
HEDRICK, Ralph ..... 4 ... 2
HEINDSELMAN, Lois ..... 3 ... 1
HENRY, Fern ..... 1 ... 1
HERBERT, Curtis ..... 2 ... 2
HERSHBERGER, Ben ..... 3 ... 1
HESS, Mark ..... 3 ... 1
HIPKINS, David ..... 3 ... 1
INGLES, Bob ..... 1 ... 1
JACKSON, George ..... 3 ... 1
JOHNSON, Eric ..... 3 ... 1
JORDAN, Wayne ..... 3 ... 1
KIMBALL, Michael ..... 1 ... 1
KINGSBURY, Richard ..... 3 ... 1
KOKTON, Paul ..... 3 ... 1
KREITZER, Mark ..... 3 ... 1
LAWRENCE, Paul A. U. ..... 3 ... 1
LEVITCH, Leon ..... 1 ... 1
LILLICO, John ..... 13 ... 5
LOEFFLER, W. J. ..... 3 ... 1
LURIE, Mordecai ..... 6 ... 2
LYNN, Frederick ..... 6 ... 2
McCLURE, Wallace ..... 1 ... 1
McGUIRE, Michael ..... 4 ... 2
McKINNON, Karl ..... 1 ... 1
MARCIANO, William ..... 15 ... 5
MARTEN, Gil ..... 3 ... 1
MATHESON, Duncan ..... 1 ... 1
MATTHEWS, John ..... 3 ... 1
MENSCHING, Dale ..... 6 ... 2
METZ, Al ..... 2 ... 2
NEIE, Gary ..... 3 ... 1
NICOLAI, Jay ..... 3 ... 1
ODENHEIMER, Fred ..... 6 ... 2
OSBORNE, James ..... 9 ... 3
OSBORNE, Joseph ..... 3 ... 1
PERKINS, Robert ..... 4 ... 2
PERSON, Donald ..... 1 ... 1
PETERS, George ..... 3 ... 1
PETERSON, Gerald ..... 3 ... 1
PHILLIPS, J. ..... 3 ... 1
PREUITT, Ernest ..... 4 ... 2
RADD, Dorothy ..... 3 ... 1
RAPPAPORT, Joel ..... 3 ... 1
REITER, Michael ..... 1 ... 1
REQUE, Styrke ..... 1 ... 1
RICHARDSON, James ..... 6 ... 2
RUSSELL, Bob, Sr. ..... 8 ... 8
SAAH, Joseph ..... 3 ... 1
SCHMITT, Paul ..... 6 ... 2
SCHOPPERT, Robert ..... 12 ... 4
SEITZ, Al ..... 3 ... 1
SEYMOUR, Ed ..... 1 ... 1
SIEROTA, Walter ..... 3 ... 1
SKOLNIK, David ..... 3 ... 1
SMIT, Robert ..... 18 ... 6
SNYDER, Willis ..... 3 ... 1
STARES, J. H. ..... 1 ... 1
STEELE, Joe ..... 10 ... 4
STONE, Patrick ..... 6 ... 2
SVEC, John ..... 1 ... 1
THILE, Scott ..... 1 ... 1
UPHAM, Russ ..... 3 ... 1
VARNADO, James P. ..... 3 ... 1
WAGNER, Lloyd ..... 9 ... 3
WAGNER, Robert ..... 6 ... 2
WALKUP, Ken ..... 6 ... 2
WEEKS, George ..... 4 ... 2
WEST, Richard ..... 2 ... 2
WICKSELL, Larry ..... 1 ... 1
WILLIAMS, Kenneth ..... 3 ... 1
WILLIS, Aubrey ..... 1 ... 1
WISENBAKER, Martin ..... 1 ... 1
WOODALL, Dennis ..... 3 ... 1
ZEISEMER, Bruce ..... 3 ... 1
ZELLMAN, Adelaide ..... 2 ... 2

New Members

REGISTERED TECHNICIANS

Cleveland, OH Chapter
McCOY, ALAN H.
44230 Hughes Rd.
Oberlin, OH 44074

Houston, TX Chapter
KENNEDY, PATRICK M.
401 Heights Blvd.
Houston, TX 77007

LARKEY, FRANK R.
10422 Town Square
Sugar Land, TX 77478

LYNN, SAM R.
9726 Grenadier
Houston, TX 77089

WILLIAMS, VERNON P.
11215 S. Wilcrest #606
Houston, TX 77099

Idaho West Chapter
MULLINS, GENE
326 Bitteroot
Boise, ID 83709

Northern Michigan
BRANT, LEONARD W.
2840 Holiday Hills Rd.
Traverse City, MI 49684

RICHARDSON, PALMA R.
848 Washington
Traverse City, MI 49684

Orange County, CA Chapter
TRAPPA, JOSEPH T.
12642 Arletta Dr.
Garden Grove, CA 92640

Phoenix, AZ Chapter
SCHMIDT, DAN F.
6045 W. Hollyhock
Phoenix, AZ 85033

San Diego, CA Chapter
KAY, MITCHELL H.
10315 Fairhill Dr.
Spring Valley, CA 92077

Toronto, ON Canada
CLARK, MAX K.
General Delivery
Leith, ON N0H 1V0

ROBINSON, CLARENCE
391 Homewood Ave.
Orillia, ON L3V 3K9

Vancouver Island, Canada
RHODES, DOUGLAS K.
1710 Lillian Road
Victoria, BC V8S 1K9

Wilmington, DE Chapter
STERNER, THOMAS M.
1809 Walter Drive
Wilmington, DE 19810

APPRENTICES

Idaho West Chapter
HAMMARSTEN, DEE M.
2754 Argentina Lane
Boise, ID 83704

Houston, TX Chapter
JUSTICE, JACK M.
47 Marabou Place
Woodlands, TX 77380

Mississippi-Gulf Coast Chapter
HAWKINS, DAWN G.
610 Catchot Place
Ocean Springs, MS 39564

Pomona Valley Chapter
WHITCOMB, LLOYD O.
1749 W. Houston Ave.
Fullerton, CA 92633

Reading-Lancaster, PA Chapter
BROWN, RUTH A.
512 Ridge Pike – Rear
Lafayette Hill, PA 19444

ALLIED TRADESMAN

DUSENBURY, DONALD L.
11608 Detroit Avenue #3
Cleveland, OH 44102

ASSOCIATES

Ottowa, Canada Chapter
LAUZON, KEN L.
1345 Wellington St.
Ottawa, ON K1Y 3B8

Pomona Valley, CA Chapter
MITCHELL, LOREN
5024 Etiwanda Ave.
Mira Loma, CA 91752

Redwood, CA Chapter
CARTER, ERNEST C.
5595 Mill St.
Fortuna, CA 95540

Syracuse, NY Chapter
BROWN, REGINALD H.
Kirkland Ave.
Clinton, NY 13323

Toronto Canada Chapter
SMITH, PAUL M.
72 Old Orchard Grove
Toronto, ON M5M 2C9

STUDENTS

Central Florida Chapter
VACCARO, DANIEL
7612 Ferrara
Orlando, FL 32809

Cleveland, OH Chapter
MITCHELL, TONY W.
317 Niagara Road
Vermilion, OH 44089

Houston, TX Chapter
PAPIN, FRANCIS M.
5638 Trafalgar Dr.
Houston, TX 77085

Idaho West Chapter
KELVIE, DENNIS C.
422 White Cloud Dr.
P.O. Box 4892
Boise, ID 83709

Minnesota-North Iowa Chapter
RYAN, KEVIN E.
RR 2
Houston, MN 55943

South Florida Chapter
CERWINSKI, JEFF T.
10561 S.W. 71st Ave.
Miami, FL 33156

RECLASSIFICATIONS

REGISTERED TECHNICIAN

Daniel Harteau
John Vail
Karl Vogellehner

CORRECTION

APPRENTICE

Jo Shelnutt

PIANO TECHNICIANS GUILD
24th Annual Convention
and
Technical Institute
San Francisco Hilton Hotel
July 6-10, 1981

Coming Events

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

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

April 11, 1981
LOS ANGELES CHAPTER SEMINAR
University of Southern California
Booth Hall

Contact: Elvah Brown
3903 Olive St.
Huntington Park, CA 90255
(213) 588-3709

April 13-14, 1981
MICHIGAN STATE CONFERENCE
Michigan State University
East Lansing, Michigan

Contact: Thomas McNeil
119 Allen Street
Lansing, MI 48912
(517) 372-7296

APRIL 23-25, 1981
NORTHWEST DISTRICT CONFERENCE
University Tower Hotel
Seattle, Washington

Contact: Don Galt
9229 15th Ave. NE
Seattle, WA 98115
(206) 522-3363

April 24-26, 1981
NEW ENGLAND REGIONAL SEMINAR
Boston Park Plaza
Boston, Massachusetts

Contact: Kenneth Hagberg
12 Radford Road
Princeton, MA 01541
(617) 464-5529

May 2, 3, 1981
MISSOURI STATE SEMINAR
St. Louis University
St. Louis, Missouri

Contact: James (Jim) Grebe
3161 S. Jefferson
St. Louis, MO 63118
(314) 776-7117

May 15, 16, 1981
UTAH STATE SEMINAR
Holiday Inn
Salt Lake City, Utah

Contact: Paul L. Stephens
516 5th Street
Odgen, UT 84404
(801) 392-3921

THE AUXILIARY EXCHANGE

Luellyn Preuitt

Here is a message from President Jewell — "ALOHA! We have arrived at that time of year again! Taxes, auxiliary dues, and registration for the twenty-fourth annual convention. May I again remind you of the change of our dues year, as passed in the 1980 Council meeting. We are looking forward to having all of you as members again this year.

"When you receive your registration packet from the Home Office, there will be some information we wish you to help us with. It will be a great help to us if we can estimate the approximate attendance at the President's Reception and the Installation Luncheon, costs for which are included in your registration fee. These two functions are for auxiliary members only. If you wish to attend and are not a member, see Julie Berry at the convention.

"The Wine Country/Sonoma tour fee should also be included with your registration for convenience of scheduling. We certainly would appreciate your decision as soon as possible. This tour is open to everyone, including Guild members if they wish to go. Thank you — Jewell".

Following is the report of the nominating committee for auxiliary officers for the year 1981-82.

President — Julie (Mrs. Ronald) Berry; First Vice-President — Belva (Mrs. Richard) Flegle; Second Vice-President — Shirley (Mrs. Richard) Truax; Recording Secretary — Bert (Mrs. Walter) Sierota; Corresponding Secretary — Agnes (Mrs. Charles) Huether; Treasurer —Ginny (Mrs. Robert) Russell. Julie Berry, chairman; Helen Dessens, member; Mabel Hiatt, member.

Second Vice President of the Auxiliary, Shirley Truax, is with us again this month. Her article is titled "FRIEND" — "It seems in these days of high prices, most folks are more value conscious — how best to spend that small dollar?

"Dick and I found our Piano Technicians Guild time/cost versus value study still remains positive. We know of no other comparable value. The social benefits alone make Piano Technicians Guild worth the time and price.

"Working in a factory, office or store there is always another with whom to discuss your work on a routine basis. This exchange of ideas is beneficial to the business being conducted and to the folks who conduct the business.

"The piano technician, in most cases, works alone. Of course there is the important customer relationship but no routine business associate contact — unless, that is, the technician is an active member of a PTG chapter.

"As members of an active Guild chapter we've found the exchange of methods and ideas on a social level is beneficial and the common Piano Technicians Guild goals kept ever mindful. Also, it's just very nice to have someone to talk with on a routine basis about everyday business encounters — the problems, the successes.

"As an auxiliary member I look forward to each seminar we plan to attend. I'm never disappointed with the event, and I always leave with that good feeling that comes after a very pleasant experience.

"Get involved with the Piano Technicians Guild. Get to know these warm, friendly knowledgeable and talented folks — you'll be happy to call them friends."

Thanks to Shirley for sharing her thoughts and conclusions with us.

Have you noticed how "coincidence", or whatever you wish to call it, sometimes wraps an entire column of the Exchange around the same theme? Here's Julie Berry, First Vice President of the Auxiliary, who says "IF YOU'RE NOT GOING TO SEMINARS, YOU'RE MISSING OUT ON A SPECIAL EXPERIENCE."

"Another article with this same title could be written and directed to technicians, but this article is directed to you as a member of the Auxiliary. Other articles have been written to tell you about the fine classes and social events which are planned for Auxiliary members at Guild functions, but this article's purpose is to encourage you to go to seminars for other reasons.

"Wives who attend Piano Technicians Guild functions with their husbands (and I speak of women only here, because I have not had an opportunity to observe husbands who attend with their technician wives) return home with a better understanding not only of what his professional affiliation means to him, but with a better understanding of what it means to him to even be a piano technician. Most people who are piano technicians are doing what they **choose** to do, unlike people in many other professions. They enjoy their work, and they enjoy sharing ideas about piano technology with others in the profession.

As you know, many customers are not interested in all the technical aspects of what comprises a good piano tuning; they just want the piano tuner to come make the piano sound right again. Many technicians relish an opportunity to discuss details of the trade. Wives who attend seminars and watch their husbands' eyes light up as they discuss with other technicians small intricacies of a particular piano will not feel jealous of the time he gives to the Piano Technicians Guild. These wives will see the fulfillment and professional nourishment which interaction at a seminar can give a technician. Wives who ride home from a seminar with a husband whose head is still buzzing from all the excitement of the seminar will understand better how rejuvenating these professional meetings can be. It will be one more perspective the couple can share, one more line of communication strengthened.

"Wives who attend seminars will become acquainted with the technicians who serve as role models for their husbands. Their husbands will point out technicians in the crowd and say, 'That is so-and-so; he makes his own soundboards,' or 'That is so-and-so; she showed me how they do dampers in her shop.' Instead of resenting these faceless people he raves about, the wife who is present will begin to share her husband's goals and excitement.

"Some of you who read this may feel it is great for some women to spend all this time sharing a husband's professional involvement, but it isn't feasible for a woman who has a career of her own to pursue. However, I maintain it is most important for a woman who also has a career of her own. By spending time at one or two seminars or conventions a year a professional woman in her own right can do some intensive catching-up on how her husband is getting along in his own profession. She can leave her own job and her own worries behind and concentrate on someone else's sphere of influence, giving the interest and support she would like to have returned to herself at one of her own seminars. At the same time her husband is busy in class she can spend some time relaxing away from the phone and out-of-town. In our current fast-paced society it is not only beneficial, it is imperative that we pause to revitalize our interest in ourselves and each other.

"It is not hard to see that technicians who enter the Piano Technicians Guild with the support and involvement of their spouses have a better chance of making a meaningful commitment to the organization. You don't need to look further than the Guild President and his Board of Directors to find a dynamic group of women who are always present at seminars and conventions, sharing, socializing, and supporting their husbands in their professional endeavors and personal triumphs.

A SPECIAL POST SCRIPT TO HUSBANDS AND CHILDREN OF WOMEN TECHNICIANS:

"I wish there were more of you who attended functions of the Piano Technicians Guild with your

technician wife and/or mother, because it is just as important for you to share what goes on as it is for wives of technicians. Women technicians often have a long road to travel to prove themselves capable in this profession; they can make better progress if they know their families understand their goals and support their efforts. If you have any questions about ways you can help or ways you can fit in and make yourself comfortable as a member of the Piano Technicians Guild Auxiliary, please drop me a line at 6520 Parker Lane, Indianapolis, IN 46220".

Thanks to Julie for another interesting and thought-provoking article.

Remember the Rockwell print showing our little red-headed boy watching the "piano tuner" at work is still available. There are many fine uses for this print and many occasions on which they will be appreciated as a gift. To receive one, send a check for $3.50 (or for as many as you want) to Julie Berry, 6520 Parker Lane, Indianapolis, IN 46220. You'll be glad you did.

President Jewell mentioned the change in dues billing in her message, and it might be advantageous to repeat, from the January *Journal*, the explanation offered by our treasurer, Belva Flegle. This change was approved by Council last summer.

Belva's explanation follows — "Heretofore, our fiscal year has been May to April. The approved Bylaws change states that our fiscal year will now be January to December" * * * * * * * * * * "The major adjustment will be in the billing of annual dues for the next year. You can help your treasurer facilitate this change. This is our plan!

1) You will be billed as usual in April of 1981.

2) You will be billed for $7.50, which will pay through April 1982 plus the remainder of 1982. In other words, you will not be billed again for dues until November/December of 1982 and that will be for 1983 dues. At that time, it will be the regular fee and we will once again be billing on a yearly basis. This $7.50 is a one-time billing to include one and one-half years until we catch up to our new fiscal year.

3) This will make it possible for me as your treasurer to bill you only once. It will mean you will only have to write one check rather than two and it will also save postage by having this single billing.

4) If you prefer to send only the yearly $5.00, that will be perfectly fine. I will then bill you next April (1982) for one-half year, then again in December for the new year. We will work with you to make this change."

See you in San Francisco! □

CORRECTION

In transcribing the President's Message for Auxiliary Exchange March 1981 copy this writer erroneously gave the impression that the wine country tour fee is included in spouse registration. This is not true. The cost of the tour is $28.00 in addition to registration. — Luellyn Preuitt. □

Classified Advertising

CLASSIFIED ADVERTISING RATES are 20 cents per word with a $5.00 minimum. Full payment must accompany insertion request. Closing date for ads is the first of the month prior to publication.

Box numbers and zip codes count as one word each. Telephone numbers count as two words. Names of cities and states count as one word each.

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

The Journal does NOT provide blind box service. Please include a mailing address and/or telephone number with your ad.

Ads appearing in this journal are not necessarily an official endorsement of the services or products listed.

FOR SALE

CUSTOMER'S QUESTIONS? The Piano Owner's Guide will answer them between tunings! Inquiries welcome. Hardbound, $6.95; Softbound, $3.95. Trade discounts, terms. **APEX PIANO PUBLISHERS, 2621 South 8th St., Sheboygan, WI 53081. (414) 458-4489.**

MASON HAMLIN upright "screw stringer", serial 3556. Made 1889, style 6. Requires work. Black case, very good. **Dick, evenings, (212) 651-3207.**

STEINWAY 6'2". #199013 Reproducer grand (no player action). Rosewood. Sale or trade for rebuilt, refinished grand. **B. Pillmore, Route 2, Box 190B, Hillsville, VA 24343. (703) 398-2030.**

NEW SOUNDBOARDS. Sounding board replacement, pin block installation, downbearing adjustment, restringing, action rebuilding and excellent refinishing. All work approached with careful consideration given to both the scientific and musical aspects of the piano in our care. Price sheet upon request. **Southwest Piano Reconstructors, Kelly Anderson, 607 E. Main, Lancaster (Dallas), TX 75146. (214) 223-1439.**

NEW, SOPHISTICATED ELECTRONIC TUNER helps get the job done faster and with absolute accuracy. Details and trial offer from **Kleiner Music, 3701 PT 25th Ave. SW, Naples, FL 33999.**

CHROMATIC TUNER, PETERSON 320. Back issues of Journal. **Ronald Poire, 8328 E. 25th Pl., Tulsa, OK 74129, (918) 622-2872 all hours.**

ZUCKERMANN HARPSICHORD KITS — A real challenge for the interested technician. Factory direct shipment at factory prices. Troubleshooting and advice for kit builders. Authorized Agent: **Yves A. Feder R.T.T. Harpsichord Workshops, 2 North Chestnut Hill, Killingworth, CT 06417, Telephone (203) 663-1811**

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

PIANOS FOR SALE — Always on hand, 150 to 300 uprights! Plain case, art case, and players. Also 50 to 150 grands at all times, as is or rebuilt. Excellent brand names — no junk! All set up for inspection. Lowest possible prices. **Call for quotes: Owen Piano Wholesalers, 2152 W. Washington Blvd., Los Angeles, CA 90018. Telephone: (213) 883-9643**

KEY RECOVERING MACHINES for sale. Prices on request. Send self-addressed envelope. Or, build your own — send $10.00 for plans, photos, instructions (refund w/purchase of machine). **Solenberger Piano Service, 1551 Lynn Court, Santa Rosa, CA 95405.**

STROBO TUNER used only three times in shop. Mint condition. $275. Also two stage dollies (trucks) for small grands. $125 each. **Roland Grittani, 427 Waterloo Str., London, Ontario, Canada N6B 2P1. (519) 434-0027.**

HELP WANTED

PIANO TECHNICIAN. Luther College, a liberal arts college in scenic northeast Iowa, announces a full-time eleven-month staff position in keyboard and repair. Responsibilities: piano/harpsichord tuning; tone/mechanical regulation to factory specs; restringing/other structural rebuilding; maintenance of concert instruments; some maintenance of mechanical action pipe organs. Send credentials and letter of reference by May 1 to: **Dr. John Strauss, Department of Music, Luther College, Decorah, IA 52101.**

MASTER TUNER-TECHNICIAN. Artist piano-rental company seeks master tuner-technician. Must have positive self-image of his professionalism. Work with the greatest pianos and artists in the world. Master technician is sought for long-term employment in New York City, with possible relocation to San Francisco or Los Angeles. Must be willing to embrace with equal zeal the following: tuning, rebuilding, truck driving, piano moving, regulating, voicing, road touring and sometimes long and unusual hours. Benefits: work with the world leader in concert piano preparation and provision, all types of artists, all types of music. As a reward for long-term loyalty, profit sharing or other bonus could apply. **(212) 582-6798.**

IN-SHOP OPPORTUNITY. Wanted: Fully experienced technician/tuner who desires to do restoration work. Firm is well-established in player, grand, and obsolete pianos such as English and French actions, as well as the square grands. We need a fully experienced person to fill out our staff of rebuilders. **Lavender Music, (912) 272-2727, 112 Park Pl.; Dublin, GA 31021.**

FULL-TIME PIANO TUNER-TECHNICIAN. Old-line dealer on Florida Gulf Coast. Finest lines and reputation. Only highly qualified technicians need apply for permanent position. Send complete resume. **Reynalds Music, P.O. Box 608, Pensacola, FL 32593, (904) 438-1628.**

WANTED

WANT TO BUY a Charles M. Stieff Scale Number 37, 5'8" grand piano. **Mr. T. Greenway, Route 1, Box 60-T, Valdese, NC 28690.**

PIANO TECHNICIAN seeking job opportunities; willing to relocate; registered craftsman member. Please write: **Walter F. Gramza, Jr., P.O. Box 201, East Rochester, New York 14445**

WANTED—OLD COPIES of the "Etude" magazine. State date and price. **Mr. Wm. J. Dorley, 110 Stratmore, Friendswood, TX 77546.**

MISCELLANEOUS

PIANO TUNING & REPAIR. Well equipped shop. Top qualified teachers. Steve Fairchild, Director. **Piano Rebuilding by Dante, 2294 Locust Ave., Ronkonkoma, NY 11779. (516) 588-6446.**

WHIPPEN REBUILDING. Revive the "feel" of a Steinway grand piano action. The piano action specialists at New England Piano Action Co. can completely rebuild and modernize Steinway whippens at a cost far less than that of a new set. Please write or call for more information and prices. **New England Piano Action Co., 6 Vernon Street, Somerville, MA 02145. (617) 628-1591.**

ATTENTION PIANO RETAILERS & TECHNICIANS. Do you need a quality piano rebuilder and refinisher? Reasonable wholesale prices. Write for brochure listing prices and qualifications. **Dante Piano Rebuilders, 2294 Locust Ave., Ronkonkoma, NY 11779. (516) 588-6446.**

HARPSICHORD TUNERS: If you work on a Neupert Christifori model, in rosewood with five pedals, on casters, with a serial #23692, please inform the music department at **Los Angeles Valley College, 5800 Fulton, Van Nuys, CA 91401, (213) 781-1200.**

FOLLOWING
THE PIANO TECHNICIANS GUILD CONVENTION
IN SAN FRANCISCO
JULY 6-10, 1981

CONVENTION IN SAN FRANCISCO
RELAX IN HAWAII

THREE ISLAND POST-CONVENTION TOUR: OAHU, HAWAII AND MAUI

Kailani World Travel, Inc. is offering a **MONEY-SAVING POST CONVENTION** tour from San Francisco or from your home city with tremendous air savings to convention city, San Francisco, then on to Honolulu, Kona, Hawaii and Maui.

KAILANI'S THREE ISLAND HAWAII POST CONVENTION TOUR INCLUDES: 8 Days/7 Nights: July 11-18

* Round-trip air transportation from your home city to San Francisco and round-trip air from San Francisco to Hawaii including all inter-island air travel (Note: Direct service from Honolulu to your home city will be used where possible on the tour's return).
* Complimentary in-flight food and beverage service.
* Round-trip transfers and baggage-handling gratuities on each island.
* Information and hospitality desk at each hotel on each island.
* Services of members of the Kailani World Travel staff throughout your stay.
* A Kailani World Travel Flight Bag for each tour member.
* Fresh FLOWER LEI Greeting on arrival in Honolulu.
* Hotel Accommodations: 3 Nights at Hilton Hawaiian Village, Honolulu
  2 Nights at Kona Hilton, Kona
  2 Nights at Wailea Beach Hotel, Maui
* All hotel and air transportation taxes.
* Full schedule of optional tours on each island.

COST PER PERSON: Costs as shown are based on double occupancy and are based on projected air fare increases thru **January 20, 1981** out of each of the Zone cities as indicated below. Please note that any increase or decrease in air fares after **January 20, 1981** will be passed on to each tour participant.

PRICE GUARANTEE: Kailani World Travel will guarantee the cost of the tour as shown if the total tour cost less $350 is prepaid in full prior to January 20, 1981.

ZONE A — $1179 Per Person	ZONE B — $1099	ZONE C — $999	ZONE D — $889
Baltimore	Atlanta	Kansas City	Denver
Boston	Chicago		Phoenix
Cincinnati	Dallas		Salt Lake City
Cleveland	Des Moines		Seattle
Detroit	Houston		Portland
Miami	Minneapolis		Los Angeles
Pittsburgh	New York		
Washington	New Orleans		
	Philadelphia		
	St. Louis		

TOUR PRICE FROM SAN FRANCISCO ONLY — $799 Per Person

Single Supplement – $225, Triple Reduction — $25, Upgrade at Hilton Hawaiian Village to Rainbow Towers: $40.

RESERVATION APPLICATION:
PIANO TECHNICIANS GUILD
POST CONVENTION TOUR

Return to: **KAILANI WORLD TRAVEL, INC.**
119 NO. COMMERCIAL ST.
BELLINGHAM, WA 98225

Enclosed is my check in the amount of $_____ representing a deposit of $100 per person, or the total package cost less $350 for price guarantee, for my party of _____ person(s). Please confirm me on _____ Three Island Hawaii Program.

Hilton Hawaiian Village Hotel Upgrade _____Yes _____No

My departure city is _____ Desired departure date _____

NAME: _____ First Name of Spouse _____

Address: _____ City, State, Zip Code _____

Home Telephone: _____ Business Telephone _____

Others in my party (Please indicate ages of children) _____

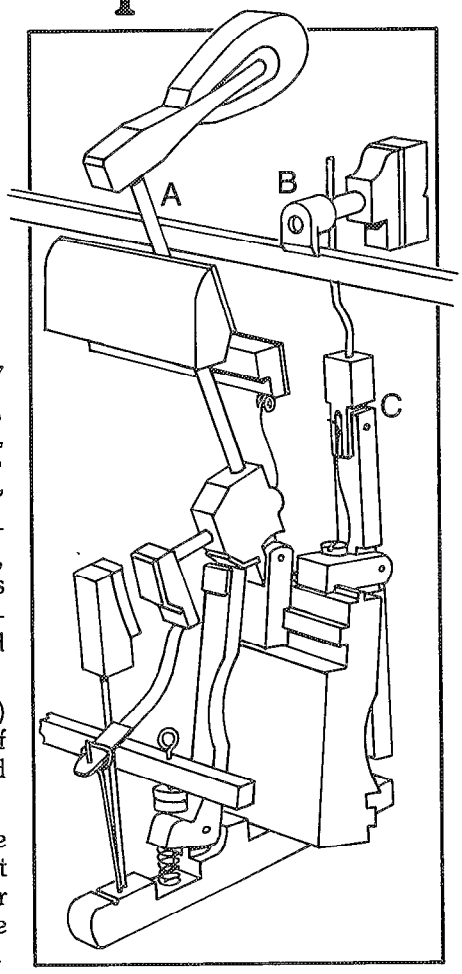
Type of accommodations: _____Twin/Double _____Single _____Triple

Please make your checks payable to Kailani World Travel, Inc. and return to the above address. You will be invoiced for the balance of your tour cost which will be due no later than 6 weeks prior to departure. Should you cancel your tour arrangements after making your final payment, a $100 per person cancellation fee will be assessed. Trip cancellation insurance is available thru our office for a reasonable cost.

FOR INFORMATION CONTACT: KAILANI WORLD TRAVEL

*In Washington State, call 1-800-562-2597
*In Ore., Ca., Ariz., Nev., Utah, Ida., Mont. and Wyo., call 1-800-426-2561
*All other states call 1-206-676-1250

The Wurlitzer sostenuto system —so simple to service



INSTANTLY ACCESSIBLE FOR SERVICE

The sostenuto feature, a popular option on all current Wurlitzer studio, school and chapel pianos (Models 2962 and 2960), follows the principles proved in fine grand pianos and is even easier to service.

Operated from a sostenuto bar (A) actuated by the center pedal, any of 68 dampers may be picked up and held for sustained tones.

A Neoprene sleeve (B) on the damper block shaft has a lip that catches behind the sostenuto bar blade to hold the damper. Neoprene is a virtually indestructible material.

NO NEED TO REMOVE THE ACTION

Technicians will be pleased to know that all adjustments may be made from the *top* of the piano. It is not necessary to pull out the action.

Another fine point is our unique damper lever (C) which is made in two pieces, hinged and sprung to provide flexibility and make adjustments easier.

A new all-spruce Duraphonic Multiradial™ Soundboard improves tuning stability. In tests with up to 90% relative humidity, solid spruce expanded 5 times more than the new Wurlitzer design, causing more serious changes in string tension.

Wurlitzer Conservatoire Model 2960 with optional sostenuto meets all known school specifications. Maximum string length is 48½ inches.

As you continue to service our pianos, your comments will always be welcomed.

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The Music People
DeKalb, Illinois 60115

PIANO TECHNICIANS GUILD

APRIL 1981 UPDATE

Notice of Staff Assignment

It is with pleasure that I announce that Ailsa Thompson is being promoted to Associate Director of the Guild. AMI hired Ailsa as Director of Membership Services several years ago when she and her husband Ron moved to Seattle from Wyoming. She has done an outstanding job with this post and we feel it is time she became more involved with other facets of Piano Technicians Guild administration. She has trained an excellent staff and has been our key resource person in the Guild for some time. Members who have made inquiries and contacted the office from time to time can testify that Ailsa is "right on top of things" at all times.

Immediately under Ailsa is Dorothy Carver, who will be taking on many of Ailsa's duties as Director of Membership Services. May Namba, who many will remember from last year's convention store, will continue to serve PTG as its chief research and records person.

Joe Epler, who has served the Guild primarily in convention management for many years, will continue as Convention Coordinator and will be assisted by Marilyn Johnston, who is also familiar to many members from past conventions.

The above staff members will be in San Francisco this summer to answer your questions and hear your comments. Kathie Kull, Managing Editor of the *Journal*, will also be with us, and I am sure you will find it a pleasure to get to know her. We are all looking forward to the convention this year and welcome any comments or inquiries you might want to make or information you might wish to convey.

Report of the Nominating Committee

Jack Sprinkle, Chairman

The Nomination Committee submits the following report:

For President: Sidney O. Stone.

For Vice President: Ernest S. Preuitt.

For Treasurer-Secretary: Charles Huether.

The following are the only names submitted to the committee as nominees for Regional Vice Presidents:

Southeast Reg.: Marshall Hawkins.

Central West Reg.: Richard Flegle.

Central East Reg.: Robert Perkins.

All of the above have received the official "Outline of Duties" pertaining to the respective offices and the required Consent to Serve form.

The first three officers are elected during the Council session and the regional vice presidents are elected in the regional caucuses.

Additional nominations for any office are in order prior to the elections through the nominating committee. Nominations may also be made from the floor during the Council session, or in the case of RVPs during the caucuses, provided that the proposed nominee has been informed of the duties of the office and has signed the required Consent to Serve Form.

1981 Council Agenda Books

This year the Council Agenda Books will be available to any member on request for a small fee to cover cost.

All chapters will receive a Council Agenda Book without charge as usual and this should be made available to all chapter members who are interested in viewing the contents. The Agenda Book should then be passed to the chapter delegate to bring to the Council session.

Agenda Books are mailed to the chapter president for receipt in May.

Any member who wishes to have an Agenda Book may order one from the Home Office. A small number will be available for sale at the convention.

Allied Tradesmen And Other Nontechnical Members

The Guild bylaws establish the extent to which nontechnical members may advertise services and technical ability. Since the Guild has established rigid requirements for the highest qualifications as Registered Technician, it is of considerable importance that members of other classifications do not advertise or imply qualifications in the Piano Technicians Guild beyond what the classification actually states.

Members who practice piano tuning should take the required tuning and other examinations and should not be accepted or continue in a nontechnical membership classification.

Guild Audit, Financial Statement

An audit of the Piano Technicians Guild has just been completed for the fiscal year 1980. Copies are available from the Home Office, should any member wish to have one. Members of the Board of Directors have also been given copies; information is available from the officers or Regional Vice President in your area.

A Statement of Income and Expense has been provided by an outside certified public accountant, and is hereby published as a point of information for the membership.

THE PIANO TECHNICIANS GUILD, INC.
BALANCE SHEET
DECEMBER 31, 1980

ASSETS

CURRENT ASSETS		
Cash in Bank (Seattle First National)	$ 77,818	
Accounts Receivable	273,099	
Inventories (Note 5)	37,575	
Prepaid Maintenance	327	$388,819
FIXED ASSSETS		
Furniture and Equipment	26,828	
Less Accumulated Depreciation	(17,338)	9,490
OTHER ASSETS		
Organization Costs		1,450
Total Assets		$399,759

LIABILITIES AND FUND BALANCES

CURRENT LIABILITIES		
Accounts Payable	$ 15,677	
Taxes Payable	2,370	
Deferred Compensation (Note 3)	6,000	
Unearned Dues (Note 7)	248,846	
Due Received — 1981 (Note 6)	96,545	$369,438
LONG-TERM LIABILITIES		
Deferred Compensation (Note 3)		32,500
Total Liabilities		401,938
FUND BALANCES		
Contributed Capital	2,555	
Sustaining Fund	10,661	
Members' Equity Fund	(15,395)	(2,179)
Total Liabilities and Fund Balances		$399,759

THE PIANO TECHNICIANS GUILD, INC.
INCOME STATEMENT
FOR THE YEAR ENDED DECEMBER 31, 1980

REVENUES		
Dues Income		$236,205
Other Income		58,790
Journal and Publications Income		92,291
		$387,286
LESS EXPENSES		
ADMINISTRATIVE EXPENSES		
Employee Compensation	$112,769	
Office Administration	37,460	
Outside Services	15,512	165,741
PROGRAM EXPENSES		
Board Expenses	33,135	
National Committee Expenses	19,110	
Membership Services — General	68,217	
Financial Expenses	2,952	123,414
PUBLICATIONS EXPENSES		133,299
Total Expenses		422,454
Net Income (Deficit)		$ (35,168)

Chapter Achievement Highlights

We are almost ready the enter second quarter reporting period and have not yet heard from all chapters for the months of January, February and March. While it is still fresh, get your reports in so our statistical workup for the first quarter can be accurate. It only takes a few minutes.

The following chapters have been prompt in submitting their reports since the beginning of 1981. They are:

Northeast Region I
S.C. Pennsylvania, PA
Southern Tier NY
Western MA
Ottawa, ON Canada

South Central Region III
Baton Rouge, LA

Central West Region V
Hutchinson, KS
Minnesota-North, IA
Nebraska, NE
Ozark, MO

Southeast Region II
Baltimore
Central NC
Western NC
Memphis, TN
Southwest FL
Western Maryland

Central East Region IV
Cleveland, OH
West Michigan, MI

Western Region VI
Los Angeles, CA
Portland, OR
Puget Sound, WA
Sacramento Valley, CA
Santa Barbara, CA
Utah Valley, UT
Vancouver Island, B.C. Canada

This reports only half the numbers of chapters that had reported by this time last year. Remember — procrastination holds back progress. Your cooperation will be tremendously appreciated. — *Marshall Hawkins.*

SPECIAL NOTICE: CONVENTION REGISTRATION

The Guild Board of Directors has requested that all those attending the San Francisco convention exhibits and functions be required to wear the official convention registration badge for admittance. Your convention staff will have the badges ready for all who are registered. You are urgently requested to wear the badge at all times to avoid any confusion. This will be especially true for those attending Institute sessions and wishing to enter the exhibit hall.

YOUR CONVENTION BADGE WILL ADMIT YOU TO ALL CONVENTION ACTIVITIES. TICKETS ARE ALSO REQUIRED FOR OPTIONAL FUNCTIONS.

DUES INFORMATION

Partial Payment Billings

The regular second billing has been mailed to all those who are paying dues under the partial payment plan. The second is $32.00 plus $3.00 service charge and is due April first. This second partial payment will be delinquent May 31st.

Dropped Membership

Notices announcing that membership has now been dropped have been mailed to all former members who have not made a payment on the 1981 dues. The required notice of delinquency was sent to the individual members and to the chapters and board of directors.

Reinstatement of Membership

Reinstatement of a member dropped for nonpayment may be made as follows:

a. Payment of all back dues.
b. Payment of a $30.00 reinstatement fee.
c. Acceptance of reinstatement by the chapter, or by RVP in case of a member-at-large.

Billings

If you have any problems regarding your membership dues billings, please call the Home Office as soon as possible.

Annual 1981 billings were mailed the first week of December last year. Those who elected to make partial payments were mailed the billing for the second partial payment the first week of March. The Home Office is eager to help you maintain your Guild membership in good standing.

Hardship

If you are unable to make a dues payment due to special hardship, please be sure to notify the Home Office. All members sent the delinquent dues notice were asked if they needed this assistance.

Students

Student member fee is $60 per year. Please send $60 for each renewal of student membership and each new application.

1981 Membership Roster

The 1981 Membership Roster is being prepared now. Each chapter president has received a full chapter printout on which to show any changes needed to make an accurate roster.

All members who have not responded to the annual dues billing, or whose dues are delinquent for this year, were dropped from the computer in March, and will not be recorded in the new membership roster.

Chapter Notes

Good news! We now have another new chapter in Canada, the **Ottawa Chapter**. The chapter was "born" the weekend of November 26 and 27, 1980 when 55 technicians attended a seminar and 13 became members.

Dick Bittinger and Bob Russell handled the testing with help from members of the **Montreal** and **Toronto** chapters. Charlie Heuther tutored full time for two days and one evening. John Lillico of the Toronto chapter and Lloyd Wagner of the Montreal chapter administered the new tuning test.

D. M. Best and Company Ltd. and Piano Technicians Supply Co., two Canadian piano parts suppliers, attended, along with the following piano companies and their instructors: Kimball's Eric Johnson, Steinway's Joe Besceglie, Wurlitzer's Cliff Andersen and Yamaha (Canada)'s Bob Mackie.

The seminar was the brainchild of Dick Bittinger and was organized and coordinated in Canada by Bob Smit, new Ottawa chapter president.

... A tri-chapter meeting was held in Daytona Beach in February, the participating chapters being the **Northeast Florida, Central Florida** and **Daytona Beach chapters.** Walter Pearson, president of the Daytona Beach chapter, chaired the meeting.

Doug Denham brought a grand action to class for analysis by Fred Drasche, Erwin Otto, Walter Pearson and Denham. Tyrrell Pearson discussed short cuts and emergency piano repairs in the home.

Members and spouses met for dinner afterwards, where Gladys Wicksell was guest of honor. A minute of silence was observed in memory of Carl Wicksell, who was vice president of the Daytona chapter. A few days later, representatives from Daytona drove to Orlando to pay their respects to Aubrey Willis, who was buried the following day from the Hyland Baptist Chapel.

... The **Milwaukee chapter's** February meeting format was altered slightly to include a tax consultant's suggestions on handling self-employment taxes.

Walter Damon has been nominated for Chapter Sustaining Member. Further discussion dealt with the need for some organized local advertising about Guild members and their services. A committee was formed to raise and spend funds to educate the public in this matter.

... **Los Angeles Chapter** members at the February meeting heard regional vice president Dan Evans give a technical lecture on tension of string segments. In a demonstration with a pin block and two equal speaking lengths of string with offset pins in the middle, Evans showed that with higher tension beyond the speaking length the string will stay in tune better because the hammer blow against the strings is not going to pull the string through the agraffe.

... The **Salt Lake City Chapter** February meeting featured a technical session led by Harold Miller. In a meeting at chapter secretary Carl Teel's "Piano Shop," members picked up some pointers on soundboard repair, including checking around the rim and under the bridges with a thin pallet knife for looseness and checking the bass bridge for solidarity.

Membership and Booster Club Awards

This year the closing date for points and new member credit will be Friday June 19th. Please send in all new member applications by that date for credit in the 1981 President's Club, Booster Club and Restorer's Club.

New member applications received after that date will be credited to the 1982 awards.

Fabulous Hawaiian Flea Market

This is your chapter's chance to be directly involved with the success (and the fun and profit) of the San Francisco National Convention! If you participated in last year's Flea Market, we know you'll want to do so again. If this will be your first year, start now to make the most of the opportunity.

Each chapter is responsible for the making, transporting and selling of its own product. You're given a free table and complete control over prices. The profit is all yours!

Fill out the form below right away...

. . . . . .

YES! We plan to participate in the FABULOUS HAWAIIAN FLEA MARKET at the 1981 San Francisco Convention. We'll be selling the following:

_____

_____

Please reserve a table for our Chapter/Auxiliary.

_____
(Chapter president/person responsible)

MAIL TO HOME OFFICE
BY MAY 1, 1981

_____
(Name of chapter)