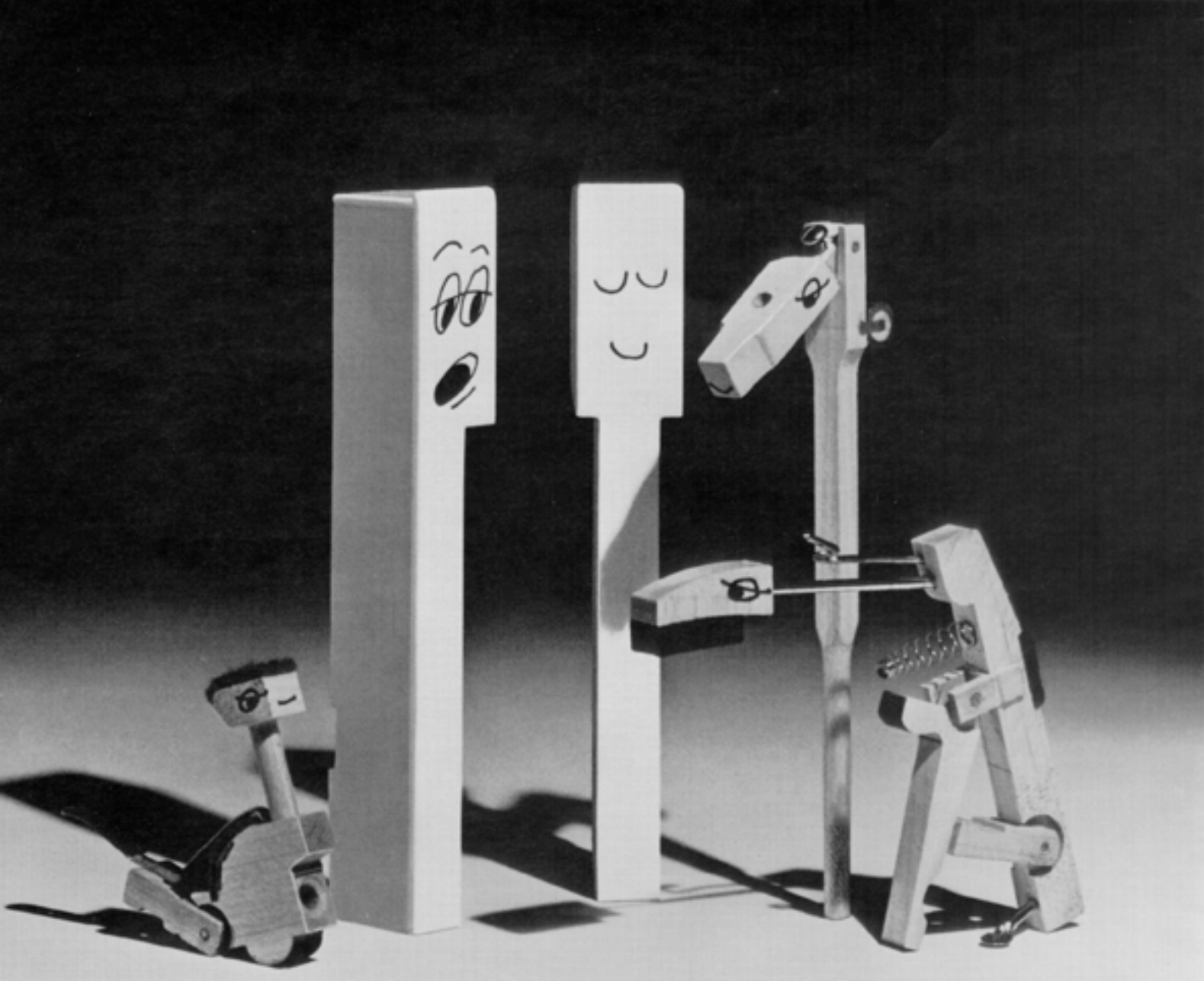
Piano Technicians Journal

"THE GIANT STEP"

1979 Convention Coverage

September 1979



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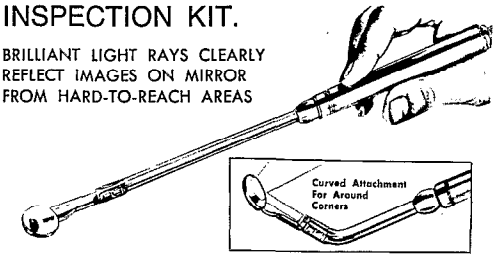

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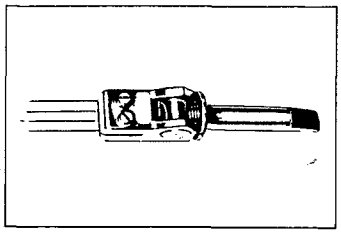

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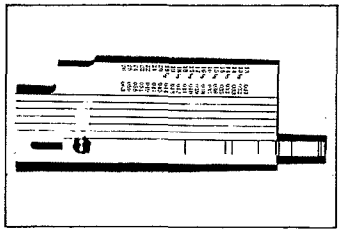

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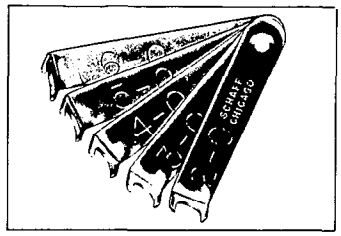

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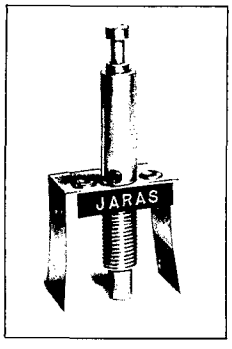

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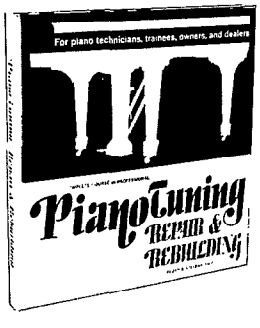

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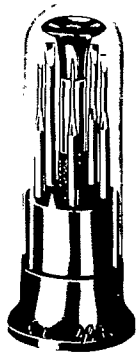

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EDITORIAL

THE GIANT STEP FORWARD HAS NOW BEEN TAKEN – our 1979 convention is now history. From all the comments we have received, it was "the best ever" . . ."smooth as silk". . . "well worth the expense". . ."great vibes" – were some of the phrases being tossed around.

Who made this possible? Everybody, of course. Those wonderful cooperative members who made their arrangements early and relieved the registration crunch. Those members who came with a positive friendly attitude and participated with enthusiasm. Those members who provided such expert instruction and those who absorbed the knowledge with such zeal and gratitude.

Institute Director Dennis Kurk and Local Host Chairman Dick Flegle, who performed their duties with true professionalism. The leadership of the Auxiliary who contributed so much to the warm hospitality and friendly camaraderie of the affair. The Board of Directors who, with great wisdom and insight, guided the whole affair into the success it became.

Finally, to our Home Office Staff who performed their duties above and beyond the ordinary, working long hours to make sure everybody was taken care of in the best possible way. It is probably not known that at least half of the staff was volunteers, receiving no pay for their efforts.

WHAT ABOUT COSTS? Amazingly enough, the registration fees and meal costs were kept at the same level as last year, in spite of a 13% inflationary factor. This means, of course, that the convention will not come out as financially successful as last year's, but hopefully more members were able to participate as a result. Be forewarned, however, that increased costs are a fact of life. Conventions are a legitimate business expense. Members are encouraged to upgrade their fees to cover these costs since getting together with other technicians in study and training is so important to the overall professionalism of the craft. Hotels are charging for their space and services based on their own costs and, after all, they have to stay in business, too.

Your Board of Directors spent long arduous hours in debate and deliberation keeping uppermost in their minds the greatest possible benefit to the membership in all of their actions. Seldom have I witnessed a more dedicated and determined group at work. Your Board has a combination of many years' experience in the Guild with which to serve you in the year ahead, and you can rest assured they will serve you well.

AND NOW – PHILADELPHIA! This city is truly a historical and fascinating place. This is where it all began. The city that helped to father the nation, the land of the liberty bell and the constitutional assembly. This is a city to savor. A city to study. A city to reflect upon. A city rich in historical significance with its fascinating back streets and shops. Walk in the steps of our founding fathers and feel the same warm breezes from the sea and smell the same pungent odor.

ON TOP OF ALL THAT, come witness the Guild's NEW APPROACH to the Institute. Director Ernie Juhn promises some surprises and exciting new concepts. Get in on the entertainment and fun; this is an event you cannot afford to miss. This double-edged advantage in education and pleasure will bring new members flocking to our 1980 enclave. **Be sure to sign up early.**–DLS●

Inside this definitive text you will find everything you need to know about the functioning of that magnificent musical instrument – the piano. Answers to questions such as "What does a dag look like and where is it located? What is a middle belly bar? Where are the 46 rails located and what is a reconditioned piano? *Piano Parts and Their Functions* is a basic book long needed in every piano technician's library. This first and only publication in English is an essential book no student, teacher, or technician should be without!

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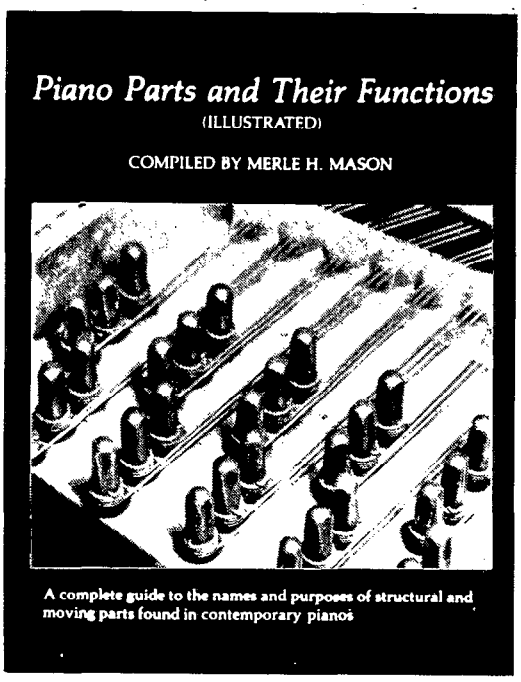

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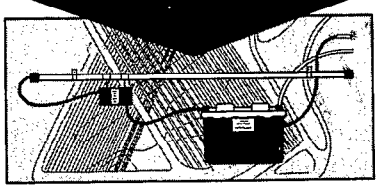

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BOB RUSSELL

President's Report

Every year we return home from the national convention telling everyone that, "This convention was the best ever!"

Well, each convention is better! Better because we learn new technical knowledge...better because we meet new friends...better because we dine in exciting restaurants...but most important, better because we share our knowledge and friendship with others and year after year our circle expands.

I have been a member of different music, trade, fraternal and teachers' groups, and I can tell you that the members of the Piano Technicians Guild are a warm, friendly, cooperative and sincere group of people. I'm not the only person who feels this way. These same thoughts have been expressed by hotel personnel, waitresses, convention bureau receptionists, etc. So you see, each convention is better because of the wonderful gift of sharing displayed by the Guild.

Recently I had the opportunity to visit a piano tuning school and speak to these prospective members of our ranks. As I addressed the group and looked into their attentive faces, the thought came to my mind that these young people were the future technicians of our Guild. I wanted them to realize just how great an obligation each of them had toward this new profession they were preparing for. The knowledge, skill and integrity that they would learn would, in turn, be shared by them with the next generation of piano technicians. We must continue this process if our craft is to remain healthy in the future.

I remember vividly the day that a fine gentleman and Guild instructor *touched* me with the knowledge that there was something more to my profession than just "tuning" pianos! When this technician instructed, you could see everyone's eyes light up with the knowledge he imparted to them. My friend is no longer with us, but he left a great legacy to his people. It is now our responsibility to pass his legacy on to others that their lives may be enriched by it.

When a person learns he is important, it won't be long until he becomes a better craftsman. We have an obligation to help one another. We call it the "ministry" of the Guild. ■

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JACK KREFTING, TECHNICAL EDITOR

THE TUNER-TECHNICIANS FORUM

In recent years a growing number of technicians have been expressing interest in piano design and scaling, resulting in a number of highly theoretical articles in this publication. The average technician has been left out of the discussion simply because he is intimidated by complex mathematical equations that almost inevitably accampany such articles. Equations look foreign and unfathomable to many of us, and the presence of even a simple equation on a page is like a neon light that says, "Forget it, turn the page, this is too tough to wade through." This happened to me more times than I care to admit, and I know I'm not alone.

Accordingly, I have asked Dave Roberts of Cleveland to write a series of articles on mathematics for the technician. Roberts, a highly esteemed Guild instructor in scale design, maintains that anyone who can add, subtract, multiply and divide, can easily learn to translate those skills into the language of higher mathematics. When the unknown is explained in simple terms, it loses its aura of mystery and can become a part of our working knowledge. I would urge every technician who is even remotely interested in piano design to read this series of articles, the first of which appears in this issue.

Pinblock Drilling

Few if any rebuilding procedures are more important or critical than that of pinblock drilling; yet for some reason, few if any of these highly critical procedures have received fewer column-inches of discussion over the years.

Part of the reason for this may be that pinblock replacement has not always been considered an essential facet of rebuilding. Years ago, it was not uncommon to hear technicians speak of 5/0 pins and piano rebuilding in the same breath. Pianos were relatively cheap, and most technicians concentrated on tuning, regulating and replacing felt and leather parts. If the piano needed major work, the owner was often advised to trade it in on a new one.

With the dramatic rise in price of new grand pianos, this situation has turned completely around. Pinblock replacement has become an everyday fact of life for the rebuilder; and even soundboard replacement, once almost unthinkable, has become almost routine in the larger shops. If piano prices continue to rise as they have in the past few years, it will soon become economically feasible to replace soundboards and pinblocks in vertical pianos, too.

Having gone to all the trouble to replace a pinblock, the technician is well-advised to complete the job with as much care and precision as possible. The little things like bit temperature, spindle speed and rate of feed are very important, making the difference between a piano that is solidly smooth to tune for many years and one that is jumpy and inconsistent. A good block, properly installed and maintained, should last at least 40 years; so if you rebuild a piano even early in your career you may be tuning that piano twice a year or so for the rest of your life. You will be reminded of how well you drilled that block every time you tune it, maybe 50 or 100 times. In contrast, that super regulation of the action is far more transitory, to say nothing of how much easier it is to correct if a mistake is made. Viewed from that perspective, the drilling of the block should receive even more careful attention to detail than the fine regulation of the action.

The most obvious variable would be the actual diameter of the drill bit. This will vary from 0.240" to 0.272", depending on the type of pinblock. Consult the pinblock maker or distributor for the proper sized bit to use. Please note that this wide range of bit diameters is used with 2/0 pins — we are not talking about oversized pins. Some blocks, because of their construction, require a smaller hole and more crushing of wood fibers for a sufficiently tight fit. Generally speaking, blocks with relatively few plies or softer wood require a smaller hole than blocks of multilaminate construction.

Of equal importance is the type of bit used. Do not attempt to use ordinary jobber's bits in a pinblock. Special high-helix pinblock bits are designed and ground to more exacting specifications for the chip ejection and minimum flute contact. Such a bit will drill a rounder, cleaner and cooler hole without the wandering tendency of a jobber's bit.

Spindle speed is very important, and should be set according to the type of block and drill bit. Not only will the bit cut more efficiently at the recommended RPM, but this will also allow the actual hole size to be controlled by the rate of feed. If the bit is turning too fast, the complementary feed rate cannot be maintained without clogging the bit and building up heat. If it is turning too slowly, the technician will be unable to control hole size with the feed rate — he will have to wait for the bit to cut, maintaining too slow a feed. At 600 RPM, for example, there is only one feed rate possible without hogging the bit, and that rate will have to be very slow. One element of control is thereby lost, and the result will be a block that is either too tight or jumpy or both.

The following table can be used to determine what size pulleys to use to obtain the desired spindle speed when using a 1725 RPM motor.

Some experimentation may be in order for a particular combination drill bit and pinblock, but I would suggest starting in the 900 - 1000 RPM range. At this speed you will find you have the greatest degree of control over the ultimate size of the hole, which can be varied according to the feed rate.

Experiment on scrap pieces of pinblock stock to determine the optimum feed rate. First try a fast speed, allowing about four seconds for the bit to go all the way through the block. If the bit clogs at that feed rate, try five or six seconds. Ideally we want to drill with a consistent feed rate from one hole to the next, as fast as the bit will

DRIVE PULLEY DIAMETER (INCHES)	DRIVEN PULLEY DIAMETER (INCHES)	SPINDLE SPEED (RPM)
2	4½	710
2¾	6	750
3¼	7	765
2	4	805
2¼	4½	815
2½	5	820
3	6	825
3¼	6	895
3	5½	905
2¾	5	910
2½	4½	915
2¼	4	920
2	3½	930
3¼	5½	985
3	5	1000
2	3¼	1005
2¾	4½	1015
2½	4	1035
2¼	3½	1060
3¼	5	1085
2	3	1100
3	4½	1115
2¼	3¼	1150
2¾	4	1150
2½	3½	1195
2	2¾	1205
3¼	4½	1215
2¼	3	1255
3	4	1265

cut without clogging. If it clogs, you are trying to hog too much material and the hole will likely become glazed from the extra heat generated by unnecessary friction. You can actually feel this happening; the bit will suddenly feel dull and more resistant to penetration. Adding pressure at this point will do more harm than good, practically guaranteeing a jumpy block.

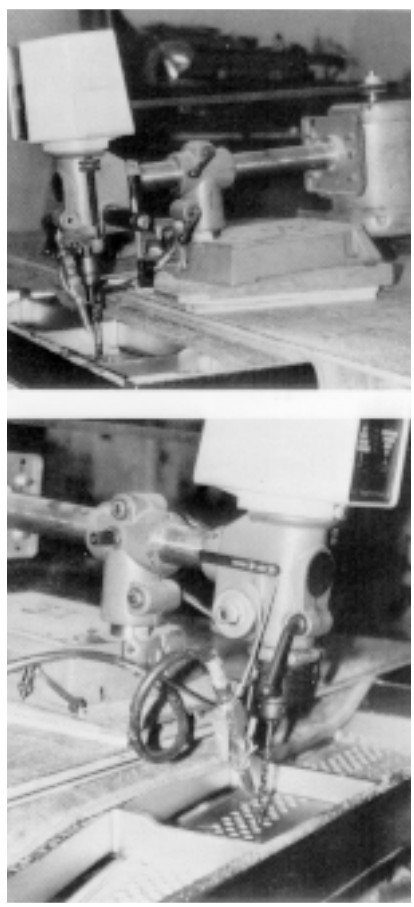
A slower feed rate, in the neighborhood of seven or eight seconds, will produce a slightly smaller hole because the decreased friction holds down the temperature of the bit, which means that it won't expand quite as much. This variability is a two-sided coin; it means that the technician must drill with a consistent feed rate from one hole to the next to get consistent pin torque, but it also allows the skilled rebuilder to alter the hole size slightly as circumstances warrant.

Because the core wire of the bass strings is thicker than the high treble strings, uniform tuning pin coils throughout the piano will mean that the pins go further into the pinblock in the treble. We compensate for this by feeding the drill as fast as it will cleanly cut in the high treble and slowing the feed rate as we get into the bass. Another situation which may call for this technique is when the plate web is thicker in some areas than others. Feed the drill bit slower in the area of the thicker part of the web and you will end up with a piano that is more consistent in torque throughout the scale.

Plate bushings are also a factor in drilling technique. I have found that the speed and feed must be altered to compensate for plate bushings. Assuming that the block is drilled while attached to the plate, the bushings will be reamed while the holes are being drilled, and this extra thickness of wood tends to clog the bit. I suggest increasing the spindle speed by 40 - 60 RPM and slowing the feed rate by one to two seconds when drilling through plate bushings. The taller the bushing, the greater the compensation necessary to keep the bit from clogging. The slower feed rate, in combination with the added pin contact area provided by the bushing, may well require a slightly shorter tuning pin that would be used if the piano had no bushings.

The occasional piano with extra-thick plate webbing presents the ultimate dilemma in pinblock drilling: In order to keep pin torque down to a tunable level without glazing, we must slow the feed and use short pins. On the other hand, a short tuning pin going through a thick plate isn't going to get very far into the pinblock. If anything, we would want to use a longer pin in such a piano, but if we do that the torque may be unacceptably high. To solve the problem, we will have to (1) find a slightly oversized bit; (2) drill bushings and blocks separately; or (3) use the short tuning pins, regardless of penetration. None of the above are particularly appealing choices, but we must pick one or the job won't get done at all. I would prefer the first, even if it meant having a special bit made for that instrument.

The real secret of uniformity in hole diameter is consistency of bit temperature from one hole to the next. The cooler the bit, the better; the cutting edges will last longer and chances of glazing are dramatically reduced with a relatively cool bit. To keep the bit cool, it is important to keep a jet of air on the bit while drilling. The accompanying photographs show how I have rigged the air hose on my own version of the Kohl drilling jig.



Lacking a compressor, the technician could even use a shop vacuum — anything is better than allowing the bit

to get too hot, and the only other way is to wait for the bit to cool between holes. That method will work but is about as efficient as shaving one whisker at a time. Allowing ten minutes between each hole for cooling, it would take nearly a week to drill a single block! With the air attachment this time is reduced to an hour or less.

Even with the cooling airstream the technician should get into a rhythm while drilling, allowing the same amount of time between each hole so the bit temperature will remain constant. If each hole takes, say five seconds to drill and two or three seconds are uniformly allowed between holes for repositioning and cooling, the hole size will be uniform.

There are five ways to drill a block, three of which can be considered practical for the average rebuilder. I will outline all five methods here and include some opinions based on my own experience.

The first method involves the use of a portable hand-held drill, which I do not recommend under any circumstances. In my opinion, there is no way the technician can keep a hand-held drill steady enough and at the proper angle to do a decent job, even if a drill motor could be found that has the requisite RPM range and the horsepower to maintain that speed. and the angle board. The disadvantages of this method are (1) that the slant angle is predetermined and cannot be altered to allow for tenor/bass overstring angle; and (2) that the block must be removed from the plate after fitting, thus wasting time. The first objection would be the more serious to the average technician and would be more important on small grands because of the greater angle of overstringing.

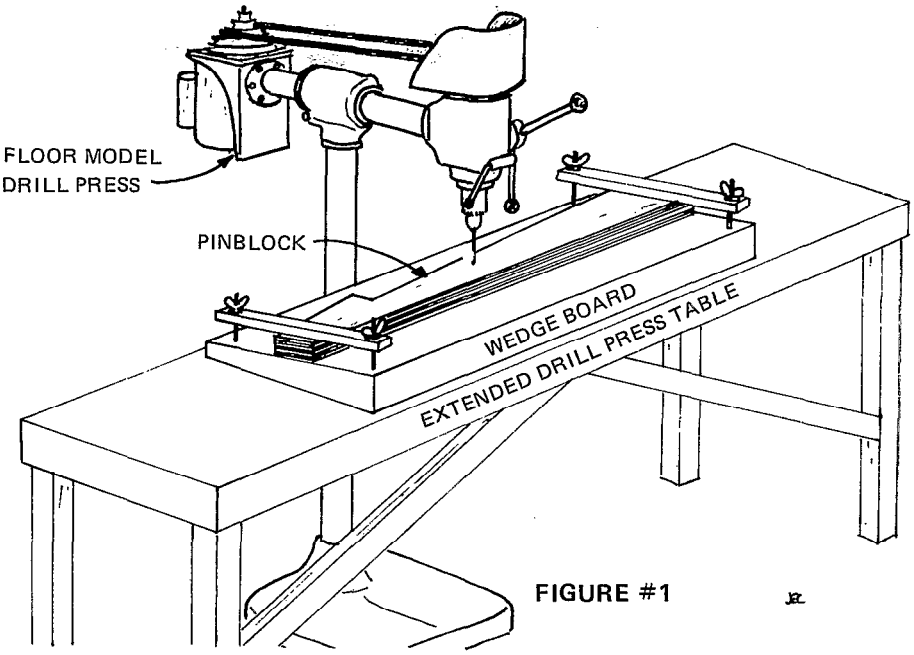


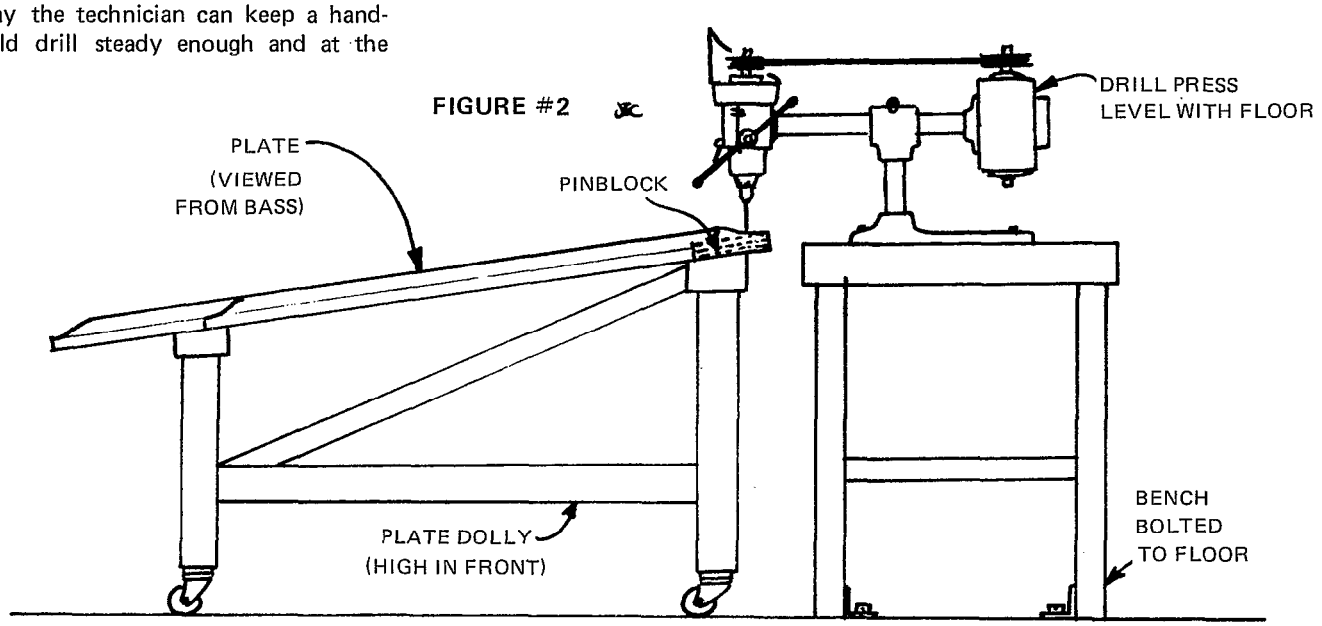
FIGURE #1

The second method is that used by piano factories, involving the use of a large motor suspended from a heavy articulated arm. This is very good in a production situation, but prohibitively expensive for the small shop.

The third method is practical, but has some disadvantages. A board is made that will support the pinblock at an angle (see Figure 1) while it is being drilled in an ordinary drill press. The obvious advantage of this method is that almost any drill press will do the job, the only modification being an enlarged press table to support the block

Method four is effective but not

FIGURE #2



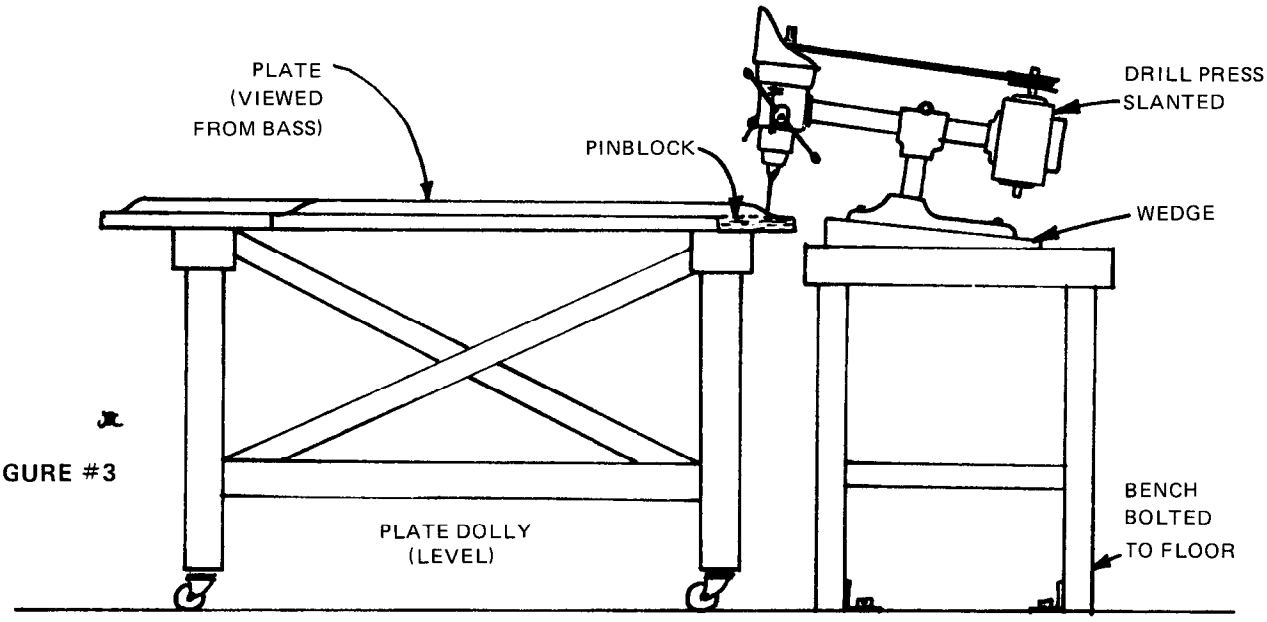


FIGURE #3

widely used. With this system, which I learned from Willis Snyder some years ago, the drill press is bolted to the floor and the plate and block move to each drilling position on a special plate dolly. This method has the advantage of great rigidity and minimum springing of the drill bit due to deflection (see Figure 2), but has some disadvantages, too. The first disadvantage is the same as that of our third method: that the slant angle cannot be changed to accommodate the string pull of tenor and bass pins. This disadvantage can be nullified effectively by mounting the drill press at an angle (according to the string pull angle) and keeping the plate level on the dolly (see Figure 3). If this is done, the angle of slantback from a side-to-side plane can be modified during the drilling process by the simple expediency of moving the tail of the plate to one side (see Figure 4).

The only other disadvantage of this fourth method is that it requires a lot of shop space. Since the drill press is bolted to the floor in one spot, the entire plate must move on its dolly while the drill works from one end of the block to the other. This means that to drill one block you need enough clear floor space for two grand pianos. If you have plenty of space, this may be the method for you; if not, you might consider the fifth method.

Method five, invented by the late John Kohl, involves the use of a bench model drill press modified to drill the block after installation. I have used this method since 1975 when I quit

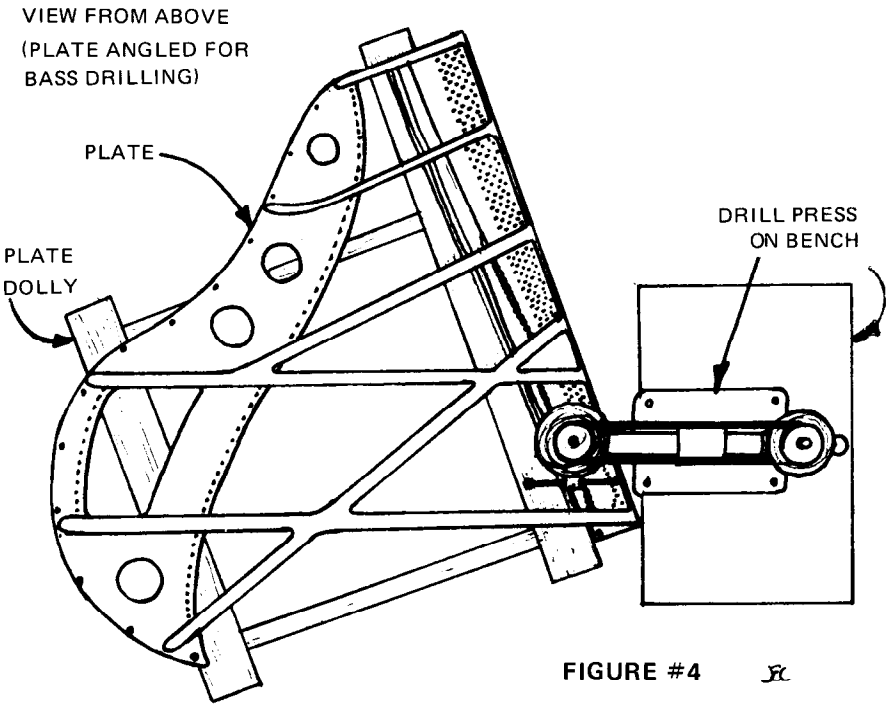


FIGURE #4

using method four for lack of shop space. My press rig, patterned roughly after John Kohl's rig (which is still in use in Cliff Geers' shop, by the way), is illustrated in Figure 5 and pictured earlier in this article.

The advantages of this fifth method are fairly obvious — almost no extra floor space is required, because the block is drilled right in the piano and there is not much overhang on the drilling board. In addition, the side-to-side slant angle can be altered very simply by changing the angle of the rig on the drilling board while positioning the bit for each hole. There are only two disadvantages to this method that I know of: (1) if the rig isn't balanced with enough weight forward, the resistance of the bit can tend to lift the rig just a little, allowing the drill bit to bend; and (2) an otherwise multi-purpose bench model drill press will become a single-purpose machine once converted because it's too much trouble to keep changing it back and forth.

Before we leave this subject we should consider drilling angles. We

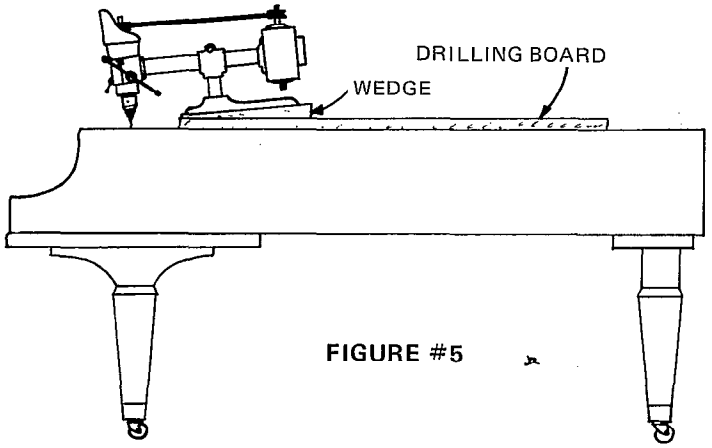


FIGURE #5

know that the tuning pin must be slanted against the pull of the string, much like a tent peg and for the same reasons, but there is some disagreement as to the optimum angle. Some say three degrees, or five or even nine. My own rig is constructed with removable shims between base and wedge, for the simple reason that no one angle will suffice for every instrument. The optimum angle, in my view, is not any arbitrary angle measured from the top of the rim; rather, it is the maximum angle that will still sustain a coil in the tuning pin. That angle might be zero degrees on a slanted block, or nine degrees on a piano whose initial string bearing points are higher than the bottoms of the tuning pin coils. The important thing to remember is that the angle must be measured from the taut string to the tuning pin, not from the rim to the pin. Figure 6 illustrates that point.

If in doubt, the technician can easily measure the original drilling angle. After the pins, strings and plate have been removed, but before removing the block from the case, lay the drilling board on the rim and place the press rig on the board. Clamp a ¼" diameter piece of metal rod stock into the drill chuck and see whether the press rig angle matches that of the holes in the old block. Add or remove shims from between base and wedge until the rod will slip into the old holes without binding, and leave the press rig that way until the new block has been drilled. This is a good procedure for duplicating the original angle and might well be used to advantage if the original angle seemed to be ideal before the strings were cut off. If the technician observed that the original strings were creeping downward on the pins, the original angle was too great and should be lessened in the new block. By the same token, if the old pins were showing signs of excessive springing due to too shallow an angle, a correction in the other direction would not be misplaced. A certain amount of judgment is in order, and experience certainly helps. If it is your first block try to err on the conservative side if at all by not changing anything too radically. Often we find that there is a good reason for a seemingly strange angle.

The shorter the piano, the greater the overstringing angle; and we want to lean the tuning pin away from the pull of the string, so baby grands will naturally need a greater side angle than larger grands. Judge this angle according to the first bearing point of the string, not according to the ultimate angle of the other end. In a very small grand, for example, the first three or four pins might well need to be slanted straight back toward the keyboard (see Figure 7) because of the relative positioning of their respective agraffes, while subsequent pins may well have to be slanted more toward the bass corner. Sight along the line from the hole to the agraffe to be sure.

Finally, I will say that the drill bit should go all the way through the pinblock in one cut. If the drill is backed out to clear chips and then reintroduced to the hole, that hole will likely be enlarged. Should such a procedure seem necessary, something is wrong. The speed is too high, the feed is too fast, the bit is not sharp enough, or there is not sufficient cooling of the bit between holes. The bit will clog

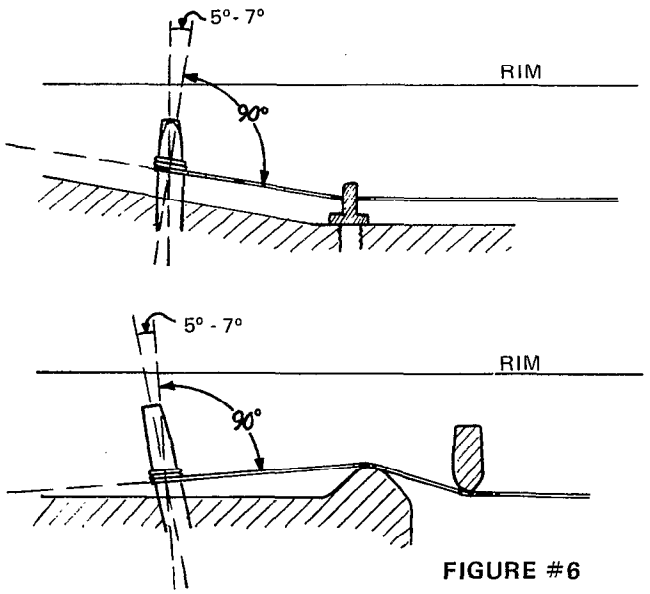


FIGURE #6

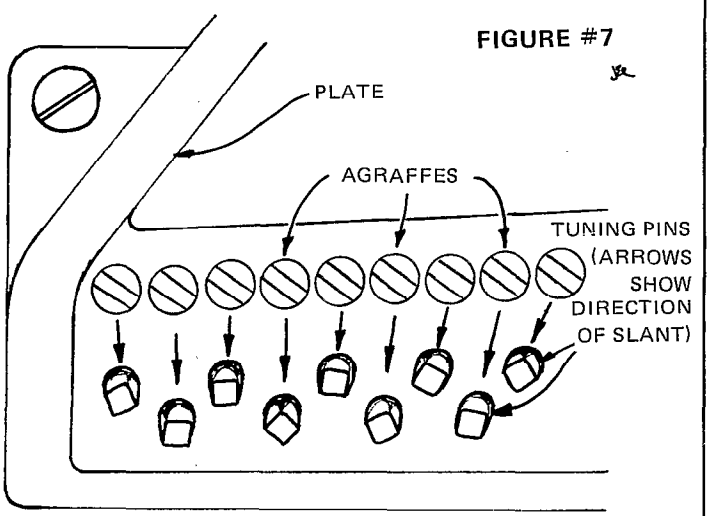


FIGURE #7

if too fast or if the bit temperature becomes excessive, and the technician would do well to stop and analyze the situation before glazing the entire block. A drill bit that has bored twelve or fifteen blocks may be losing its edge and should be replaced. Don't try to sharpen it; the job is critical and that old bit has done its job and should be retired with dignity. Buy a new one.

Above all, we must remember that there is a direct relationship between consistent drilling and subsequent consistency of tuning pin torque which will provide reliable holding power and smooth tunings for many, many years to come. Very few things are as important as that.

Verdigris in Action Centers

QUESTION: *"Recently I have encountered two piano actions and one player action which suffered from deposits of verdigris in critical places. This is a green or greenish-blue basic acetate of copper which can be prepared by treating copper with acetic acid. Practically all the action centers were sluggish in this last action. Examination revealed that this gummy verdigris had formed on the flanges, thus increasing the friction noticeably. I found that "Renuzit" was an effective solvent and cleaner, however it was also necessary to replace the center pins because of the corrosion on the two surfaces making contact with the felt bushings. These bushings were also hard, so further work on them had to be done to obtain a smooth operation of the flange.*

On the player action I discovered verdigris on the valve plates and leather facings. This caused considerable leakage which was greatly improved by cleaning. Evidently these actions must have been residing in an atmosphere containing a high concentration of acetic acid or some acetate — such as a photo lab! I can understand why the copper of the brass center pins would thus unite with the acid to form this verdigris. Has this problem been encountered by other technicians?"

—Edward C. Brown, Cromberg, California

ANSWER: I don't know enough chemistry to be able to trace the process involved, but as a working technician I have found evidence which suggests a causal relationship between mutton tallow and verdigris. If the centerpins were dipped in mutton tallow during assembly, verdigris can develop in the center after a few years. The best solution to the problem is to ream and repin the affected centers. In extreme cases it may become necessary to rebush and repin. If the job is done correctly, no lubrication is needed.

Not being a player man, I will not comment on the part of the question dealing with valve plates and leather facings, other than to refer it to Raye McCall.

Hammer Weights

QUESTION: *"How can one tell what weight hammers were in a piano when the piano is not made any more and the existing ones are worn out?" — John J. Novacheck, Brooklyn, NY*

ANSWER: I would suggest that the weight selection be made on the basis of the size and type of piano. Spinets, 10 - 12 lbs.; consoles, 12 lbs.; studios and uprights, 14 lbs.; small grands, 14 - 16 lbs.; medium size grands, 16 lbs.; and larger grands, 16½ lbs.

The actual difference in weight is not so great as one might suspect by reading the weight ratings because no set of hammers will actually weigh more than two pounds. The weight rating reflects the weight of a complete sheet of felt about 37" wide and 40" long, from which about fifteen sets of hammers can be made. So a 16-lb. set of hammers contains about one pound of felt and one pound of molding, and since the weight of the moldings will be nearly constant, the difference in weight of the felt affects only about half of the total weight of the hammer. Walnut is denser than birch, but I prefer the birch because I believe the birch tail (on the grand, of course) will stay rough longer and provide more reliable checking.

In any case a good argument could be made to the effect that the shape of the hammer may be more important than the actual weight, which is decreased anyway every time the hammers are filed. The shape of the striking surface is impressed into the strings momentarily every time the note is struck and is a part of the scaling of the piano. Various partials of the fundamental are enhanced or diminished by the shape and hardness of the felt on any particular note, and makers of fine pianos pay a great deal of attention to this. One scale may require harder felt at a certain point in the scale than others, so if the instrument is still in production it is a good idea to purchase the hammers from the piano manufacturer.

At least one maker of aftermarket hammers offers the rebuilder a choice of felt density which I think is a good feature, especially for the unknown scale. When in doubt, I order the hardest hammers on the theory that it is easier to voice down than up, and new hammers tend to sound too mellow for my taste anyway, especially in the high treble. Obviously, I am speaking of personal preferences here, not established rules; the technician should exercise individual judgment based on all factors.

If a set of hammers is very badly worn, it can be difficult to estimate the original shape. This estimate is important in the unknown scale bacause the striking distance (center of hole to striking surface) must be specified to whomever will bore the hammers. According to Willard Sims you can usually tell what the original shape of the outer felt was by looking at the shape of the underfelt. Another way would be to make the estimate at the very top hammer. Since it had very little felt on it to begin with, it's a little easier to guess how much has been worn or filed away.

Open Question

Here is another of those questions for which I have no answer, in this instance submitted by Joseph Osborne of Carlisle, Pennsylvania:

"Your discussion of cracking keytops brings to mind a problem I have been unable to solve. In using ivorine stain to color-match a piece of ivorine, I found it initially changing the color to the desired yellow, but thirty minutes to a day later it changes to pink. I tried buffing heavily before application, I tried washing with any number of cleaning agents, I tried not buffing and just wiping and the results were the same. I called the supplier and they had never heard of the problem and had no advice to offer. This stain works fine on ivory, but I need a reliable stain for plastic. Can you or one of your readers help? —Joseph Osborne, Carlisle, Pennsylvania

Tip of the Month

This month's tip comes from right here in Cincinnati, Ohio.

"Greetings to the Guild from a non-member who tries to follow the same ground rules laid down as a guide for members.

Plastic elbows get brittle with age and create endless follow-ups if the entire set is not replaced. Also, despite most careful handling, portions of elbows clinging to the center pin will sometimes not shatter without splitting the thin sides of the whippen, creating additional repair work.

Vagias Ventures suggests using the tip of an electric soldering iron to soften any remnants remaining on the whippen and pulling them off. However, they assume no responsibility for the consequences of this procedure. Here is a simple way to solve this problem. Simply grasp the two sides of the whippen directly at the ends of the center pin with a pair of backcheck pliers. These pliers have parallel jaws 3/8" wide (do NOT use bending pliers!). Then with the other hand using needlenose pliers, the remaining remnants can be easily shattered and pulled off, including the bushing cloth. In my experience, I have found this method to be not only the fastest and cleanest, but also the safest."

— Ted Wadl

Reader Feedback

A member of Burnaby, British Columbia, writes in reference to Susan Graham's excellent article on bridge pins which appeared on page 19 of our June issue. Our correspondent makes note of his preference for Thermoset 103 because it cures harder than Thermoset 104. He also disagrees with the procedure of bending bridge pins, noting that a better solution to the problem of insufficient sidebearing would be the installation of a pair of oversized bridge pins for that particular string. The following is an excerpt from his letter.

". . . Gerry Caunter and I have just completed repinning the bridges of two recording studio grands, both about 15 years old. They had developed false beats and tone distortion to the point of being difficult to tune. The pins were pulled, the bridges were sanded down to just leave a trace of the string marks, then renotched using a very sharp chisel. The holes were stuffed with epoxy and the pin tips dipped in epoxy and replaced in the bridges. Excess epoxy was removed. Curing time allowed was 36 to 48 hours. The pianos were then restrung, tuned three times and used to record.

This resulted in not one false string, and the studio pianists and recording staff claim that not only was the sound cleaner, but it was actually louder than ever before. It looks like we will have a half dozen others to do as the word is getting around all the recording studios. The next time we do this job I'll take pictures, and if THE JOURNAL is interested I'll write it up."

— James I. McVay

Of course we are interested in such an article and hope to publish it in the near future, however, for the benefit of newer technicians in our readership, we should probably clarify one point. As an experienced technician, McVay was able to diagnose this problem as a bridge pin problem, which might not always be true. Since he had to remove the strings to work on the bridges, he elected to replace the strings at the same time, which is a good idea. But anytime you make two changes at once, you cannot be absolutely certain which of those changes caused the improvement. If the pins had been solidly seated in the bridges, the restringing alone would have cured the falseness. All that work on the bridges would have been pointless and unnecessary.

In this case, McVay and Caunter also renotched the bridges, so they made **three** important changes at the same time, any one of which could have possibly cured the problem on a given instrument. Obviously they found problems in all three areas and wanted to be sure of a long-lasting solution.

These pianos are not very old but in a recording studio environment they were probably subjected to much harder usage than the average instrument. In similar cases I would recommend the following diagnostic procedure:

1. Identify and isolate the problem. If most of the falseness is in the high treble, I would suspect that the bridge might have rolled or canted. This is particularly likely in the high treble because of undercutting and the angle of strings to the bridge, and any rust on the strings or bridge pins would make it even more likely because of string friction during tuning. This possibly can be comfirmed or eliminated by checking with a rocker gauge.

2. Visually inspect the bridges. Check for ovaling of holes, checking or cracking of the bridge cap, pins at odd angles, and correctness of sidebearing, notching, etc.

3. Manually check the bridge pins. Select a few wild strings as examples and loosen them. Try to pull the pins out with a small plier. If you can't, and there is no evidence that the pin is bending or the string is climbing the pin, then the problem is most likely in the string itself. Replace that one string and see what happens.

4. Know your materials. Some pianos have bridge caps made of boxwood, a material prone to surface checking. Normally these checks will have no effect at all on the performance of the bridge and need not be cause for concern; yet a similar check in a maple cap is usually not a check at all but a crack that runs all the way through the cap and can cause falseness or buzzing. Boxwood can be identified by its color (lighter than maple, almost white), its grain (very fine, almost invisible) and its hardness (it cuts very smoothly and easily). Many fine grands were built with maple caps up to the high treble, at which point the cap is made of boxwood. The difference becomes readily apparent to the rebuilder when scraping notches.

Our thanks to James McVay for his very interesting letter.

Our next letter is from Peter Redstone, a Craftsman member from Claremont, Virginia. A specialist in building and restoration of early keyboard instruments, Redstone has the following comments to make.

"I read with interest Jim Ellis' article in the June issue which was for the most part well informed and well presented, but there was one part that I am unable to pass without comment. He likens a simple Prellmechanik action to a 'very poorly regulated modern action having a shallow dip, lost motion, and completely missing letoff.' This is grossly untrue, and speaking as a maker who has restored upwards of 60 assorted eighteenth century fortpianos, I must assert that his statement is wrong for the follow-

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ing reason.

An eighteenth century hammer is minute compared with a modern one, and because of its small mass possesses very little momentum even when the key is struck hard. The thin string is also under far less tension which considerably reduces the bounce of the hammer from the string. The thickly cloth-or-leather-clad prelleiste can quite comfortably absorb the energy of the rebound if the action is carefully regulated and the moths have not denuded the prelleiste covering; and 'doubling' or 'bubbling' does not occur. Indeed, I once agreed with Mr. Ellis and had a rather contemptuous attitude toward the simple actions until my mind was changed for me by two pianists who preferred escapementless actions as 'feeling better'. In neither instance was there any doubling. Since that time I have become a champion of the simple actions! The system even works successfully with English grands as I discovered with a c.1785 Reyk which, once I treated the under hammer as a hammer and built it up with several layers of leather to absorb the rebound, caused no trouble at all with doubling . . ."

— Peter Redstone

Mr. Redstone goes on to say that a properly regulated Zumpe type piano is eminently suited for playing the music of J.C. Bach and that, in his opinion, quoting Dolge as an authority on pianos is like quoting an Amish housewife as an authority on atomic energy. On that note, we will call a halt to the Forum for this month. As always, our thanks to all of our contributors.●

Readers may contribute material to the "Forum" by writing Jack Krefting, Technical Editor; 6034 Hamilton Avenue; Cincinnati, OH 45224.

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.

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Columbus OH 43205

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RAYE MC CALL

VACUUM LINE

Since the first publication of *Vacuum Line*, I have received one communique from a technician here in California. I appreciate his taking the time to write. He took issue with my definition of the term "vacuum." In truth he may be more correct than I.

He said that vacuum is anything less than that which we understand as standard or normal atmospheric pressure. Therefore, when you exhaust the air from inside a pneumatic, the pressure on the inside will then be decreased so that the greater pressure on the outside causes the pneumatic to collapse. I would define this as relative or partial vacuum, which is usually the case in most player work. In thinking about restoring the player system, I tend to approach it from the standpoint of absolute vacuum because of the necessity to seal everything in order to achieve an airtight condition. However, I am realistic enough to know that this is a plateau that we will never reach because of the limited capability of the materials with which we have to work.

In the last article I was talking about servicing the Aeolian player. Since I ran out of space before the subject was complete, we shall pursue it further here.

You may find it necessary to remove the pump assembly from the bottom of the piano in order to gain access to the bass strings and bridge. To do this you must:

(1) *Remove the screw(s) holding the assembly in the piano.* These screw(s) will be located at the top of the pump assembly. In the newer models there are two screws but the older models had only one.

(2) *Disconnect all tubing.* There are two tubing connections at each end and they are on the back side of the pump assembly. When you are dealing with them you are always working blind. The most difficult of these is the one to the electric pump. Keep a good supply of patience on hand!

(3) *Carefully lift the pump assembly and remove it from the piano.* Sometimes this can be accomplished by tilting it forward from the top and then lifting it out. In some models you must lift it so that the bottom comes out first. The best way to see which way it will come out is to observe the amount of clearance you have between the two small brackets from which you removed the screws and the bottom of the stack.

The Aeolian player piano has an appearance much like the old foot pump players of the 1920's. The roll box doors slide open in the top front center section of the piano. In the kick panel there is a door directly above the pedals which opens to expose the player pump pedals.

The Kimball player piano looks much like any other of their spinets or consoles at first glance. When you look a bit closer you realize you are looking at a player piano. The roll box in the Kimball is at the extreme left end of the piano and is accessible by raising a small lid which has a spring-loaded hinge so that when it is raised it stays put. The lid of the Kimball player is split. The small portion covers the roll box and the longer section the rest of the top of the piano.

When servicing the Kimball player, raise both sections of the lid as far as possible. Next remove the music board and lay it aside. Before doing anything more topside, you should remove the kick panel and observe the loops of tubing hanging at each end of the piano. Check carefully to ascertain their clearance to slide upward. Now you are ready to loosen the top tray.

There is a decorative piece around the roll box which must be removed first. In the older models it is made of wood, may contain a switch and is held in place with four screws. In newer models it is a piece of galvanized metal covered with red cloth and held in place with four snaps. Remove this one carefully. When removing the wooden piece (with the switch) after the screws are out, simply lift it out and hang it over the left end of the piano. You need not disconnect any wires. At the treble end, there are two machine screws holding the top tray. At the bass end are two steel pins. When you have removed the screws, put both hands underneath the top tray and lift with the right hand first. As soon as you have raised the right-hand end approximately 4 inches, move the tray to your right so it will clear the pins. Now lift the entire tray assembly and place it on top of the pin block.

You are now ready to tune the piano as you would any other spinet. The only problems you may have are with notes 1, 2, 87 and 88. The reason for difficulties at these places is that tuning pins will be obscured by the tubing going from the tracker bar to the player action. If you are working with a late model Kimball, there is a plug at the right-hand end of the top tray which must be disconnected before lifting. Do **not** forget to reconnect this plug when you have finished, or else the player will not run.

The later model Kimball players are pretty much trouble free. They are all electric as were the earlier models. The vacuum is generated electrically and the roll is driven electrically. The little motor which drives the roll does so through a very simple transmission. In the next article this discussion on the Kimball player will be continued. There is some more information which you need to have in order to service it properly and correctly.

If you have any questions, comments or a pertinent contribution, may I encourage you to feel free to direct same to me, and I will be more than happy to answer them as best I am able.●

DAVE ROBERTS

Calculating Technician

Piano technology, like most professions, is becoming increasingly sophisticated as new knowledge and improved techniques develop in piano construction, repair and rebuilding. As craftsmen, we owe it to ourselves to keep abreast of these developments whenever we can. Sometimes, however, new information comes to us in language we do not understand, such as music theory, scientific jargon or mathematical descriptions.

The use of theory or jargon usually presumes that the reader (or listener) has an academic background in the subjects at hand. It is, therefore, no surprise that many piano technicians learn little from reading the Journal of the Acoustical Society of America, even though respected periodicals such as this contain numerous articles over many years pertinent to piano technology.

As an example, the mathematics for calculating inharmonicity in vibrating piano wires was published prior to 1900, but it was not until half a century later that piano people started to grasp a quantitative understanding of this phenomenon so basic to piano acoustics, scale design and even tuning. We can blame some of the inadequacy of stringing scales in the smaller pianos on this lack of knowledge which was available all along, but not in a language which piano people understood. Even today, few tuners or rebuilders have more than a vague understanding of piano inharmonicity as it relates to fine tuning and proper scaling.

Part of the problem for this state of affairs is that the end result of a mathematical derivation or scientific experiment is often expressed as an algebraic formula and this scares the dickens out of most technicians. This is unfortunate, because in many instances the piano technician could ignore all the complex theoretical derivations and verbal dissertations, if only he or she could understand how to apply the given formula. True, it has been argued that a little knowledge, i.e., only the formula itself, is a dangerous thing in the absence of general understanding. Maybe so, but even this knowledge is a start and is not likely to be "dangerous" if ordinary caution and common sense are exercised.

It will be the purpose of this series of articles, starting next month, to show the average piano technician that calculating frequencies, cents, inharmonicity, tension, elongation, etc., from algebraic formulas is really not difficult at all. In fact, anyone who can add, subtract, multiply and divide is well qualified. As an example, next month we'll start with the algebraic expression for the tension in a wound (or plain) piano string:

$$T = \left(\frac{PLd}{K}\right)^2 \left[1 + A\left(\frac{D^2}{d^2} - 1\right)\right]$$

Although 95% of the piano technicians I know would throw up their hands in horror at such a complicated looking thing as this, there is no reason to panic. We'll start from ground zero and describe the simple rules for using such a formula in next month's article. So, if you're interested in broadening your scope as a piano technician and have any confidence whatsoever in your cerebral capabilities, please stay tuned to this column ● ● ●

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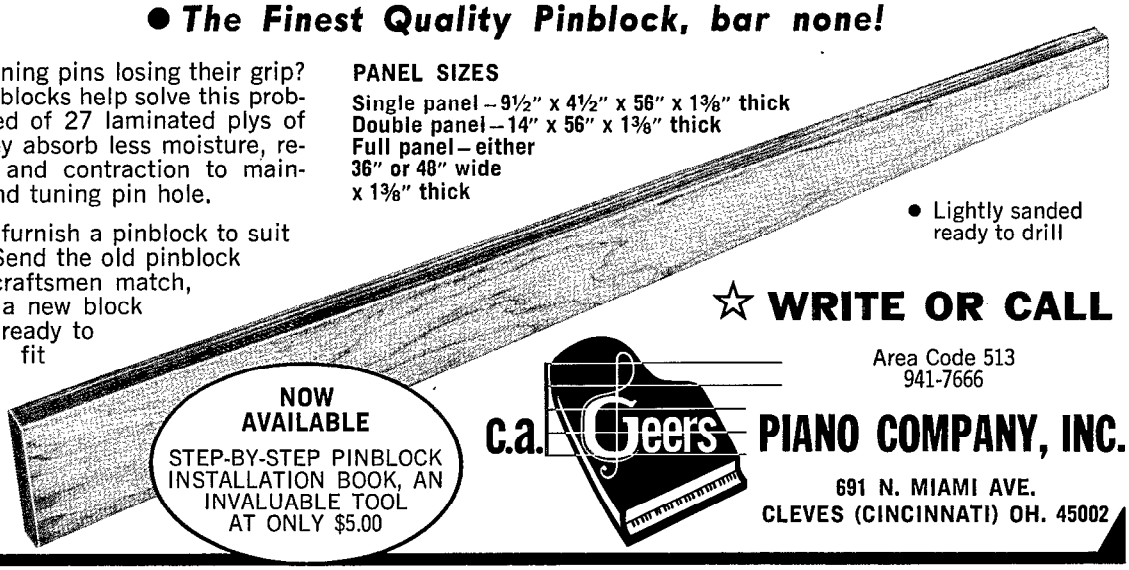

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PRISCILLA AND JOEL RAPPAPORT

VON DER WERKSTATT

Recently there was a summer workshop for piano teachers held here at the university. About half an hour was sandwiched in between pedagogy and performance to discuss piano maintenance. The faculty member leading the class did very well, pointing out the need to have regular maintenance done on the instruments on which the participants taught. "If your cars were in the shape most of your pianos are, you'd never get anywhere!" he said.

After explaining the need for regular tunings and regulations, he asked for questions. One of the most interesting was, "When a string breaks during tuning, whose fault is it?" The definite impression was that this lady was trying to place the responsibility on her tuner for replacing the string that happened to break while he was tuning. The answer was that, perhaps due to rust, imperfection in the material or maybe the constant flexing of the wire at the capo d'astro, the string broke because its time had come. Strings break when the piano is being tuned, being played or in the middle of the night when no one is around the instrument. When that string's time has come, it will break.

Now, it is up to us to replace the string, at the owner's expense. Sometimes we get a special call to replace a string; sometimes the customer lets it go until tuning time. It is a good idea to replace the broken string as soon as possible so as to avoid uneven hammer and bushing wear and/or a change in damper seating. The new string should be the same diameter as the original. If the new string is a different diameter, the tuning of the unison and the sound of the note will be affected. This is due to slight changes in tension and inharmonicity which are directly proportional to the diameter of the wire. Bass string replacement involves matching the new bass string in diameter of core, total diameter of core plus winding and length of winding. Careful attention should be given to these factors so as to replace the broken string with a new string that matches the old one as much as possible. Also the number of coils on the tuning pin and the height of the tuning pin after the new string is installed should match the rest of the stringing job.

In our shop we have a stringing box which includes all tools needed for stringing and replacement of strings. It includes the following basic items: shop tuning hammer, 2-lb hammer, coil lifting hook, needle nose pliers, screwdrivers, micrometer, string spacer, pin block support jack, pin setter, coil setter, brass stock, goggles and, among other miscellaneous things, an organized assortment of oversized tuning pins.

Here is a procedure for replacing strings that we hope you will find helpful and easy to follow.

(1) Remove old wire by first turning the tuning pin 1/2 turn in reverse. Pry becket out of the tuning pin hole by using either an awl or needle nose pliers. With the pliers or the hook, pull the coil off of the pin and remove string from piano. **Measure the wire with a micrometer!** Don't always rely on the numbers printed on the plate.

(2) Turn the tuning pin out about two full turns, leaving the hole in the pin at the 12 o'clock position. As you look straight down on a tuning pin, picture the numbers of a clock around the pin. This is a handy reference to position. You have now backed the pin out a total of 2-1/2 turns, which is enough for the coils to be put on the pin without jamming the bottom coil down onto the plate.

NOTE: If the pin feels too loose, remove the tuning pin and measure it with the micrometer. In most cases using the next larger tuning pin size will be appropriate. Many times it is necessary to replace the pin as well as the string. In grands, be sure to remove the action and support the pin block before hammering a new pin into the block. Or, to avoid reversing the pin 2-1/2 turns and possibly loosening it in an old block, you can use the "dummy pin method." Using a T-hammer, you form the coils of the new string around a tuning pin which will not be inserted into the piano. The coils are then taken off the dummy pin, slipped over the pin in the piano, and the becket is inserted and squeezed into the tuning pin hole with pliers. The string is then brought up to pitch. The advantage here is that the original tuning pin is not turned excessively in the pin block. This method could be used when the pins are marginally tight, but all tuning pins are of a uniform feel and you wish to maintain this condition.

(3) After checking the *new wire* with a micrometer to be sure it is the desired diameter, insert the end of the wire into the tuning pin hole. Make sure it first goes through the agraffe or under the capo d'astro bar as it makes life somewhat easier. The string should not stick out the other side of the tuning pin hole, but should be visible. Turn the tuning pin 2-1/2 turns while holding the wire in position, making sure the coils are formed as close together as possible. It is easy for the coils to overlap, but don't let this happen. The becket winds up at the six or seven o'clock position. Lead the wire from the agraffe or capo d'astro and place it through the bridge pins, then loop it snugly around the hitch pin and again over the bridge back to the second tuning pin.

Here the string is cut using the three- or four-finger method (depending on how fat your fingers are). Right-handed technicians will hold the wire taut in their left hand with the fingers outstretched. The edge of the first finger will be over the edge of the tuning pin closer to the speaking length. Extra wire of three or four fingers' length is allowed for the coils on the second tuning pin. If you are in the top two sections of a grand, you have the string going over the capo d'astro at this point. The finished length works out through trial and error, taking into consideration that the string will really be *under* the

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capo d'astro. If experience shows that you wind up with too few coils when finished, add a finger to your measurement or measure closer to the palm. Follow the same procedure as for the first pin to get the string onto the tuning pin.

(4) After the string is roughly on and *both* beckets are in the same position (six-seven o'clock), we proceed to the next step. The coils must be raised by using the coil lifting hook and, with the tuning hammer, putting some tension on the string. Beckets should be squeezed in tight with the pliers.

(5) With a screwdriver blade, make sure the string is down on the plate around the hitch pin. It should **not** be hung up on the hitch pin except for the Baldwin Acu-just design. Also tap the wire down on the bridge using a hammer on a piece of brass stock about 10 cm long. The brass is soft and you will avoid nicking the wire. Wires should be spaced if they are under the capo d'astro.

(6) Pull the string to pitch or slightly higher, as you wish, and then tap down the coils. The coils around the tuning pin should be together as a unit, and not spread out like a jack spring in an upright. The wire coming off the tuning pin (bottom coil) should not rest on the plate, but should be 1-2 mm above the surface. If the tuning pin is driven into the pin block, make sure this allowance is observed. Otherwise, tuning problems may result. If the wire goes over a piece of felt somewhere between the tuning pin and agraffe or capo d'astro, make sure your new wire also rests on this felt. Usually, the felt prevents this segment of the wire from ringing sympathetically and your replacement must follow this design. When you are done, pluck this segment and make sure it does not ring if it should not. If the wire is too high, the pin must be tapped down somewhat. (Support the pin block in a grand before tapping anything down!)

(7) It will be necessary to pull new strings up to pitch several times before they have stretched out and settled down.

The replacement of bass strings follows the same procedure but adds the following points.

When using a universal bass string, the copper winding must be cut off to match the original. Follow the string maker's instructions packed with the set of universal strings. If the core is six-sided, twisting the string is not necessary. If the string is custom-made, or the core is round, the string must be twisted one to two full turns in the direction of the winding. If the original tuning pin is used, this may take two people: one at the tail end of the piano to twist the string and place it on the hitch pin at which time the other person puts tension on the string to hold it there. If stringing braid winds through the wasted length of the strings, be sure to get the new string over or under the braid so that this segment does not ring sympathetically.

It is wise to wear goggles or other eye protection anytime a string is brought up to tension. Hitch pins that break or new strings that snap can do great damage when flying through the air towards you at high speed. If you get cut by piano wire, especially rusty wire, see your doctor to make sure your tetanus immunization is up-to-date.

When you are finished, take a few seconds and review if the string has been settled at all points — hitch pin, bridge and coils — and how it looks. Your job, if well done, should match the original stringing job. ●

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DEAR ROSETTE:

After several months writing the column in the Piano Technicians Journal, Rosette retires for the following reasons:

(1) Anonymity was no longer possible.

(2) Reader response was not sufficient to sustain the column.

(3) Rosette's new duties as an officer of the guild would hardly allow time to continue writing it.

-Sid Stone

lost!

LOST — One beat simulator with l.e.d. read-out of beats per second. This electronic instrument was missed after one of my classes at the Minneapolis convention. It is a prototype of the one we will be marketing, and is required in producing the best design for this instrument. If anyone knows anything about where it may have gone, please get in touch with me. A reward is offered. **Francis Mehaffey, 1031 Northwestern Drive, Claremont, California 91711. Or phone: (714) 624-7140.**

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NEWTON J. HUNT

ACCENT ON TONING

Photograph #1

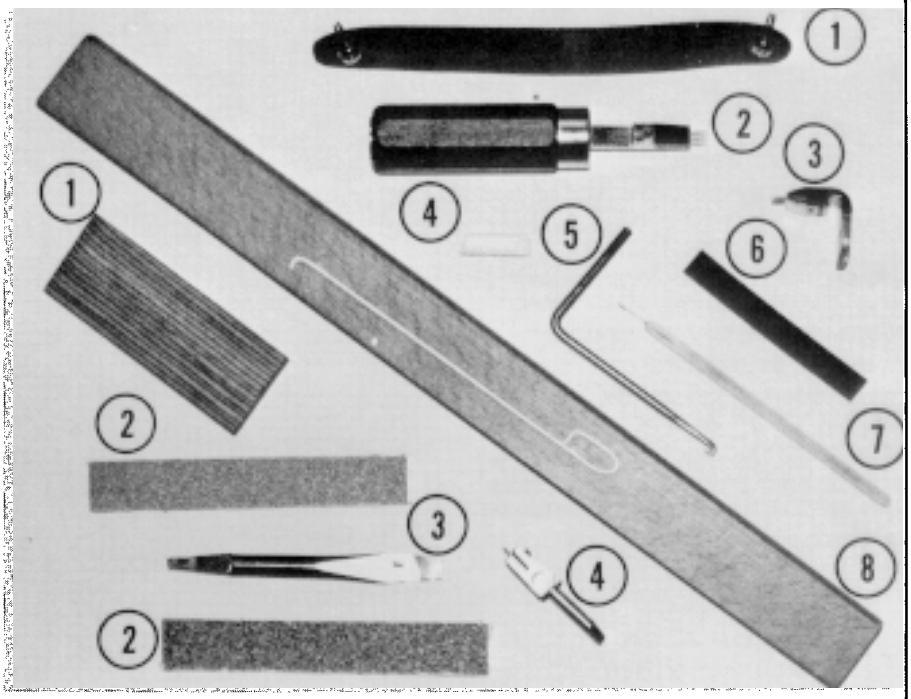
Tools in upper right area —

(1) Leather handle with screws
(2) Yamaha voicing tool (grand)
(3) Yamaha voice tool (vertical)
(4) Chalk for marking keys (the cheap crumbly kind marks and removes easily)
(5) Hook for lifting strings to level at agraffe
(6) Rubber wedge for returning lifted strings
(7) Two coffee sticks with needle glued together for reaching between strings for that last little bit
(8) Voicing bar with hammar lifter

Tools in lower left area —

(1) Small voicing block for daily field use
(2) Two sand files, paper on both sides (50/100, 80/100)
(3) Screwdriver blade
(4) Shallow voicer with four needles (# 7)

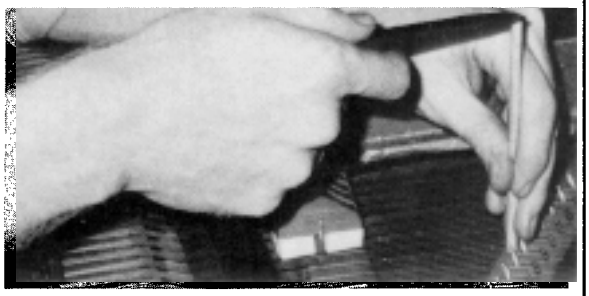
The differences in tools are not so important as having good tools and having a developed sense of their use.



Photograph # 2

Seating strings before tuning using screwdriver blade and upright hammer shank.

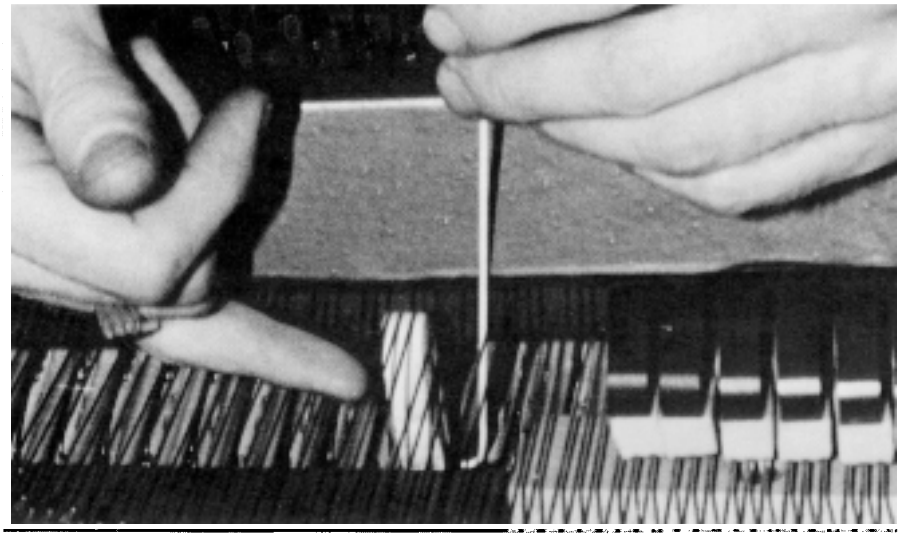
No great force is needed or desired. Too hard a blow will drive the string into the bridge and cause the very problem solved by tapping — buzzes, zings, falseness and unstable tuning. Tap at both front and back pins.



Photograph # 3

Final spacing of strings and cleaning capo bar.

A burr created because cast iron is softer than steel; wire will cause a buzz, zing or tingle. Similar noise will also happen in agraffe and aliquots. Move wire to both sides of center to clean all burrs or rust; repeat if necessary.



Photograph # 4,-

Hammer lifted, strings plucked and mark key.

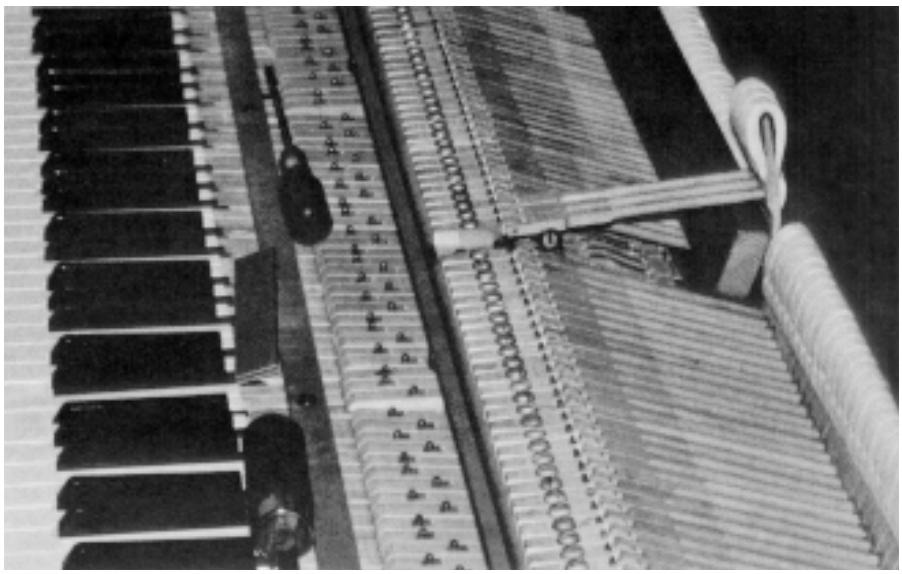
Do three at a time to save pulling action. Do double and triple string unisons all the way up. Lift the strings when unlevel, file the hammer point to mate all three strings, and then two when shifted. Do not lift hammer forcibly, especially in treble.

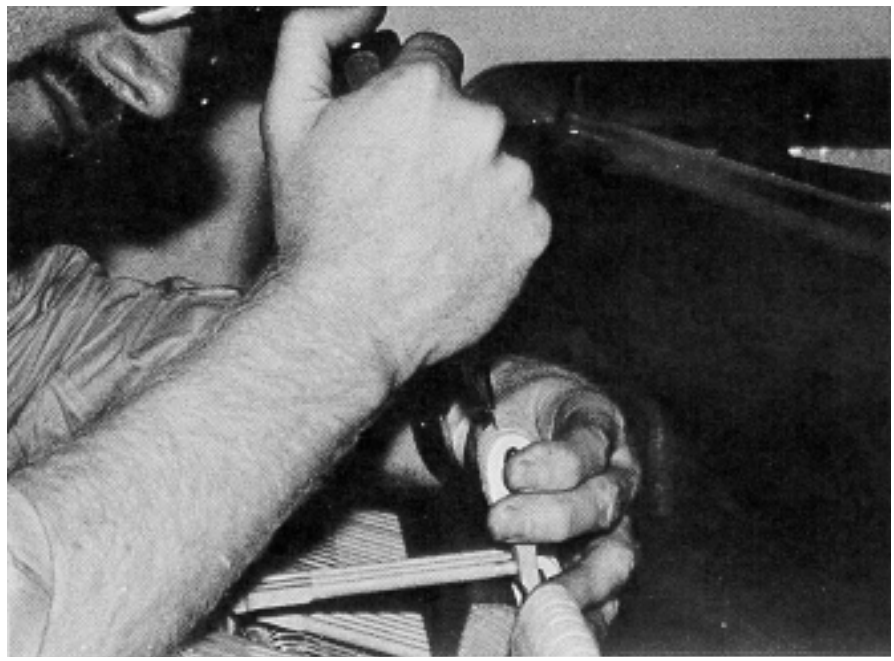
This is the most important operation in voicing and will most likely solve most voicing problems — it does come first!

Photograph # 5

Handle, bar, etc.

The handle screws into keyframe between B^3-C^4 to B^4-C^5 unless the holes will interfere with relief cuts, wedges, guide pins, etc. In these cases shift up or down one position between key front pins.





Photograph # 6

Three hammers clamped between fingers, shanks resting solidly on bar, bar resting (in this case) on hammer rest rail posts (other actions bar rests on shanks).

Do not use three hammer techniques on Teflon bushed shanks, it will damage pinning.

The tool has three # 6 sharp needles .5-inches long.

Voice three hammers until the tone is what is wanted, refile hammers to shape, recheck and go on to the next three.

This is hard work that takes much time. If you have a really difficult set of hammers it could take two days, with rests. Rest the body or ear as needed and be patient for this is really a creative art.

ELOISE ROSS

Your Security Blanket

Celebrate, gloat, be happy — there will be **NO** increase in premium for the Comprehensive Health & Dental insurance plan this anniversary! Just think about this for a moment, savor and appreciate it. In what other area are your costs stabilized in this time of inflation?

If there is a reader among you who has not heard about this plan, continue reading. If there is one who has heard but not acted, read on. If there are reader participants, read on for review of what you have and rejoice.

The plan is a unit package and may not be divided. There is medical, dental and life insurance on the member, medical and dental on the dependents.

There are three deductibles from which to choose: $100, $250 and $500. The chosen deductible applies only once each calendar year to each participant with a maximum of three per family. The deductible is satisfied by adding medical *and* dental bills. If more than one member of a family is involved in an accident, only *one* deductible is applied to the total expenses of that accident.

If there are no medical or dental expenses accumulated toward the deductible until the last three months of the calendar year, they may be used the first nine months of the next year. This "carry-over" provision makes it equitable for "late in the year" illnesses and/or injuries.

Normal pregnancy is **not** covered. However, for severe medical or surgical complications arising out of pregnancy, covered expenses would be paid after a $700 deductible was satisfied.

Occupational coverage is optional. In all areas where workmen's compensation is mandatory for the members there is no need to add it. However, this is a MUST for those who do **not** have medical protection in case of injury on the job.

The covered medical expenses are the usual, reasonable and customary charges for care and services necessary for treatment, including the usual hospital and services, not in excess of the daily semi-private room rate; licensed physician, physiotherapist, laboratory or professional anesthetist; ambulance service, etc.

Some of the *extra* items covered are: prescription medicines, blood and blood plasma, artificial limbs and eyes, casts, splints, trusses, braces and crutches, oxygen and the rental of oxygen equipment, rental of an iron lung or other mechanical equipment required for the treatment of respiratory paralysis, rental of a wheelchair or hospital-type bed.

After the deductible the Comprehensive Health & Dental plan pays 80% of the first $2,000 of covered expenses. Thereafter during the calendar year, the benefit is 100% of covered expenses up to the maximum benefit.

Benefits for psychiatric out-patient care are covered but limited to $500 annually. Benefits for pre-existing conditions are limited to $1,500 the first year. The maximum lifetime benefit is $250,000 of which $2,500 automatically reinstates each year.

The annual benefit for dental coverage is $1,000 per person. After the deductible is satisfied (single or joint with medical), covered expenses will be paid at 80% for the usual care and 50% for bridges, partials, dentures, etc. (prostodontics).

Life Insurance with Accidental Death & Dismemberment insurance is a part of the program for each member participant. Benefits are payable to the beneficiary in the event of the insured's death from any cause, and twice the amount if caused by an accident. One-half the benefit is paid to the insured for the loss of an eye, hand or foot, and the full amount in the event of any two or more such losses. In the case of total permanent disability, the premium will be waived.

The amount of insurance coverage is based on the age of the member. Examples: (1) less than 30, $5,000; (2) 30-39, $4,000; etc. At age 65 the benefits are reduced one-half and to $1,000 at age 70.

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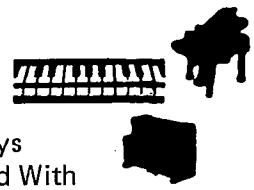

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SUSAN GRAHAM

A Giant Step Forward

22nd Annual Convention & Institute of Piano Technology Minneapolis, Minnesota July 23–27, 1979

The 22nd Annual Piano Technicians Guild Convention was held July 23 - 27, 1979, at the Radisson Hotel in Minneapolis, Minnesota. With a total registration of 967, it was the second largest convention ever — a most respectable turnout in the midst of a gas crisis.

The host Twin Cities Chapter, headed by Chapter President Dick Flegle, put in a great deal of work and planning to insure an organized and interesting time for all.

With almost 30 manufacturers, suppliers, schools and other services represented, the exhibition center was a main attraction. It was open much of the time to offer plenty of opportunity for leisurely examination of products and friendly conversation with exhibitors.

This year's classes were categorized as basic, intermediate, advanced and general interest, and a synopsis of each class was posted outside the classroom doors; these two things proved very helpful to those selecting classes. It also seems to have made it easier for the instructors, knowing that students selected their classes with a good idea of what was offered. As our field expands with new techniques, new types of instruments and new types of technicians, so must our technical institutes. Institute Director Dennis Kurk is to be commended highly for the great variety of topics offered, as well as for the organized handling of some very unusual classroom requirements (such as 16 power drills with bits and extension cords!).

Tell an average person that you are going to a piano tuners convention and the usual reaction is one of puzzled amusement. "Why? What do you do, sit around all day and listen to beats?" As I explain what it is that we "do all day," the puzzlement disappears and interest and respect increases. So, for anyone who may be similarly puzzled, let me start this report with a few thoughts about what goes on at a Guild convention and why anyone bothers to go.

The nature of our profession is such that many of us work alone, have our own businesses, and do not have much contact with other piano technicians. Not only that, but the knowledge necessary to perform skillfully and professionally is not collected in writing and available through the simple purchase of a stack of books. From the most sophisticated theories to the simplest how-to, piano technology seems best communicated person-to-person. A national convention's technical institute brings technicians from all levels of interest and experience together. Exchange and learning take place not only in classes, but in corridors, elevators and even in the hotel coffee shop over a midnight snack.

My problem at conventions is wanting to attend ALL the classes, which obviously was not possible. This year the frustration was compounded by wanting to cover as much material as possible for this report. What to do? Get help!

Therefore, I'd like to publicly thank my ad hoc committee: Rhys and Emily McKay and Wayne Matley, who were all of invaluable help in attending and evaluating classes, and my husband Joe Saah, for the photographs and his support and encouragement.

Even with help, it isn't nearly possible to cover everything. I hope this report will at least capture the tone of the convention and offer examples of the wide variety of classes and activities.

STRINGING AND BACK REPAIR

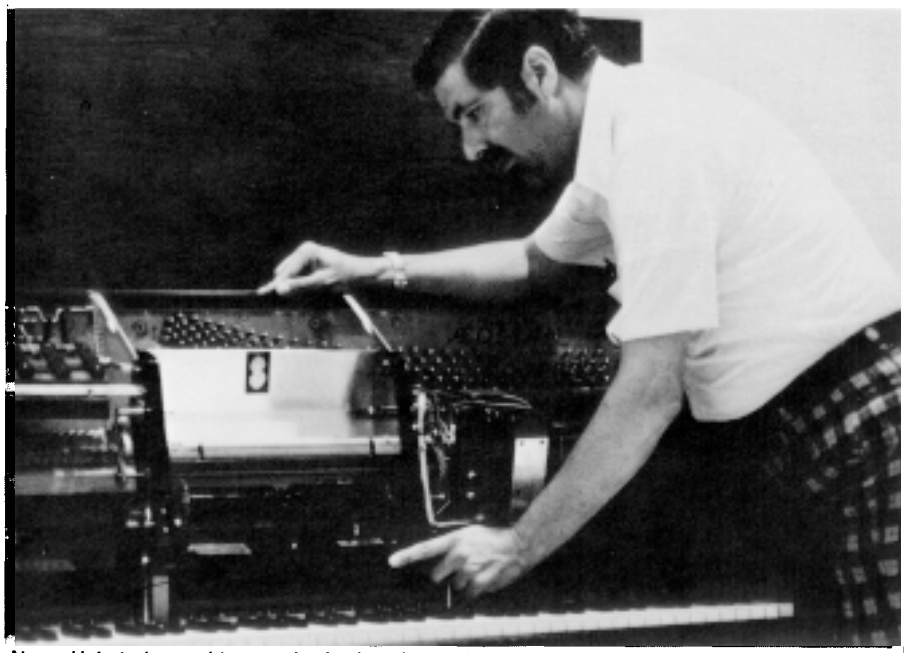
The combination of Bud Corey, plant manager, and Lou Herwig, research department from the Wurlitzer Company promised to yield practical

information and theoretical background. With a defenseless Wurlitzer strung back and a full complement of tools, they proceeded through bridge and soundboard repairs to restringing.

Lou Herwig spoke about many areas of piano construction which can be modified to control the ease with which the instrument produces, amplifies and sustains sound. He explained how the placement of bridges, both on the soundboard and in relation to each other, affect tone characteristics due to the resulting stiffening or freeing of bridge and board areas. He suggested slight modifications which can be made on bridges in existing pianos to reduce mass, increase strength or create a slight cantilever. In conjunction with this they discussed bridge pin placement: where the pins should be in relation to the notching and to the front and back of the bridge.

They enumerated problems of bridges which can cause false beats. For instance, loose bridge pins can create two different speaking lengths in one string, creating a beat as the frequencies clash. A weak area in the structure of the bridge may absorb rather than transmit energy. He also described circumstances under which a rib fit into the case may restrict the board. We learned that sound travels in spruce at the rate of 16,000 feet per second *with* the grain and 3,000 feet per second *across* the grain. This led into laminated boards and a very interesting discussion of what types of changes the laminated board necessitates, from different rib shaping to more efficient dampers.

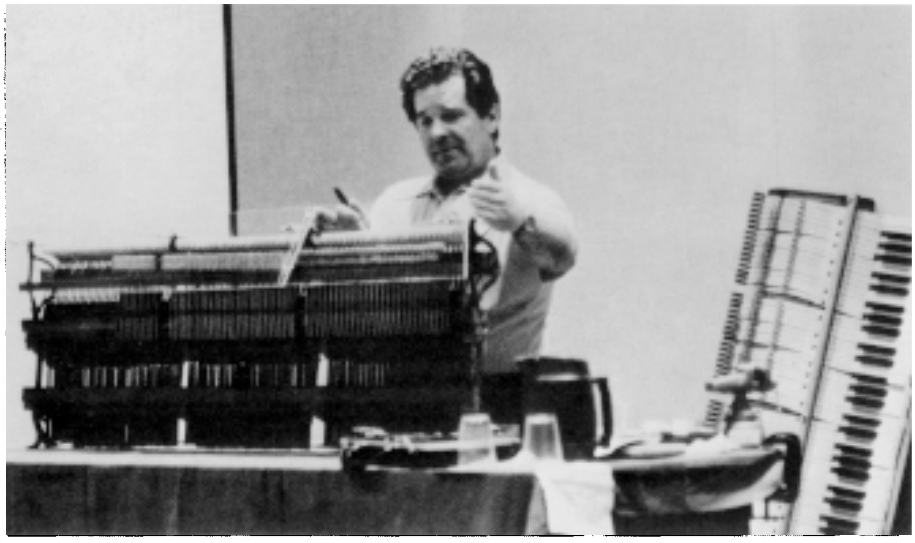
A step frequently neglected by many restringers is attention to the V or capo bar. Bud explained what the proper shape of this bearing point is: rounded and usually 3/32" in diameter. If the capo is nicked or burred the strings can jangle, and if the rounded shape is flattened in even a tiny area, it can create a little section of speaking string and result in an unpleasant high



Norm Heischober making a point in the advanced player seminar.

Richard Elrod of Aeolian demonstrating a player piano adjustment.

Dr. Sanderson explaining the use of the Sight-O-Tuner for pitch raising.



Ned Dodson demonstrating his vertical hammer hanging jig.

Bob Hill and Larry Talbott of Wurlitzer conducting their class on vertical piano servicing.

frequency sound.

Major plate repairs were discussed with the suggestion of a particular type of rod to be used in welding which has a lower than usual melt point and poses less threat to the integrity of the cast iron.

Then we came to the fun part — watching Bud Corey share some of his secrets from the days when he strung eight pianos a day. Efficiency is the key — eliminating repetitive putting down and picking up tools, groping for the end of the wire, fiddling around with coils, etc. For instance, Bud has a length of rod fastened to his wire cutters by which he gauges how far past the tuning pin hole to cut the wire to get even coils every time. He winds the coil, pounds in the pin and puts on tension to hold the coil all at once, and without letting go of the loose end of wire. When a section is strung, he uses a 5-lb. sledge and pounds the pins level gang-style.

It was a pleasure as well as a lesson to watch him work, and to listen to both these fine instructors.

BOESENDORFER AND KIMBALL SERVICING

Quite frankly, this class was a spur of the moment choice for me and I am very glad I attended. It began with a slide tour of the Boesendorfer factory in Vienna. We were able to see many of their building techniques as Roger Weisensteiner explained the reasons for each particular step being done in a particular way. Boesendorfer has been building pianos for a long time and the weight of experience commands a great deal of respect.

Bill Long of Marantz instructing on the installation and service of the Pianocorder.

After the slides, Roger and Eric Johnson showed us some of the innovations the company is trying. Samples of the new wippen and damper underlever were passed around. Instead of the Schwander type wippen, Boesendorfer is now using the butterfly-spring type (as in Steinway and Yamaha). The damper underlever has had an extra flange added which swings at right angles to the usual damper wire flange — in effect creating a universal joint into which the wire is set.

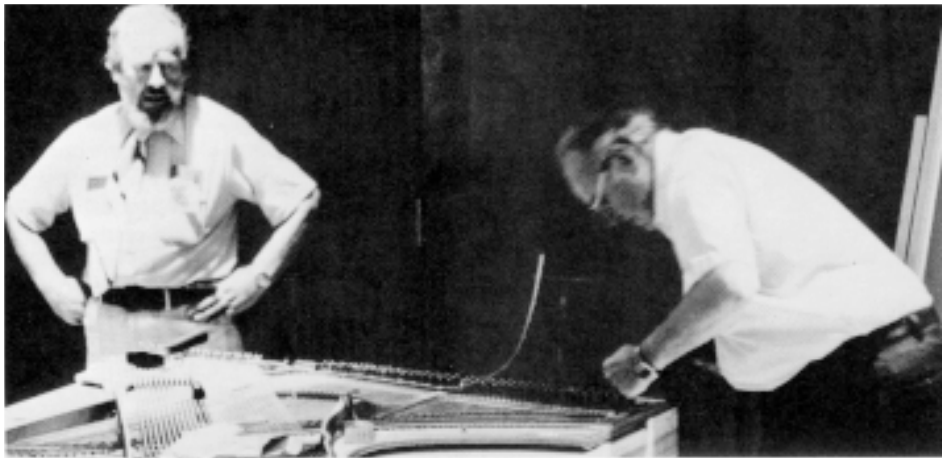
The class then gathered around an imperial grand as Gerhard Feldman, the technical consultant from Vienna, pulled the action to explain several things. We were intrigued to see him fasten a leather strap to the front of the key frame to facilitate removing the huge action: something so simple and yet so useful. One thing he explained to us is that Boesendorfer intends the unacorda pedal to move the action only enough so that a different, softer part of the hammer contacts all three strings, rather than enough to miss one string entirely.

An item of interest was the bridge notching. Boesendorfer notches the bridges to the back of the bridge pin, rather than to the center; in effect, the pin alone is the primary termination of the string, rather than pin and bridge simultaneously. This allows for any accumulation of debris which over the years could otherwise create a less definite terminal. It also allows for the slight amount a string cuts into the top of the bridge. It is a typical example of care in engineering; one of the many little things which give any piano its characteristic sound.

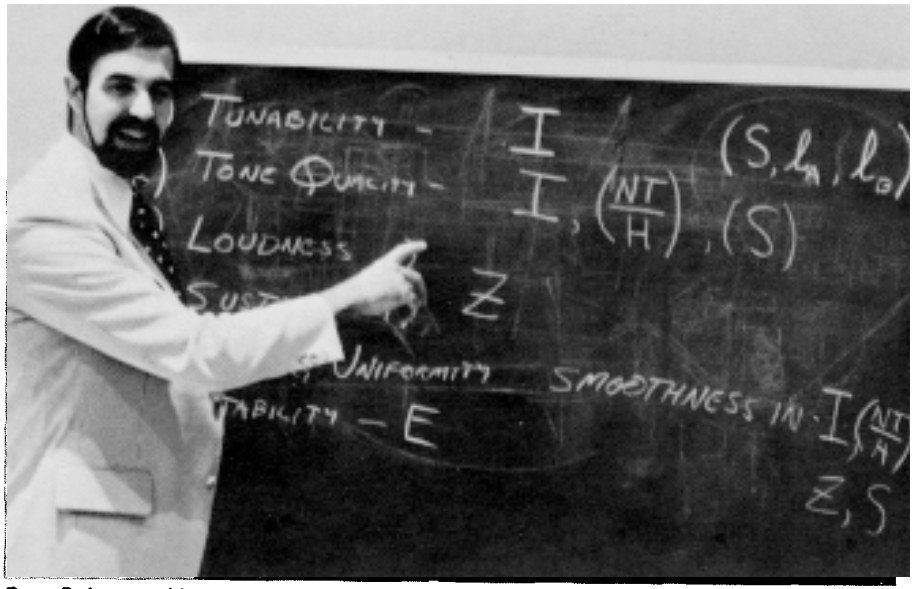
Walt Pearson, grand restringing.

Norm Neblett demonstrating use of the single needle "sugar coater."

Carl Wickrell, creative tuning.

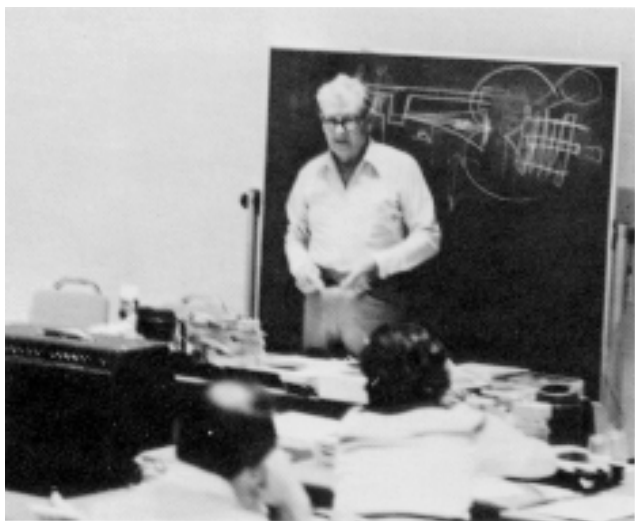


Lou Herwig supervised Bud Corey restringing, "Don't ever bend a pressure bar like that!"



Dave Roberts making scale redesign clear and understandable, but not easy.

Participants adjusting an action model in the Rhodes class.



Harold Rhodes teaching Rhodes piano servicing class.

The class probably would have examined the piano all day but we were called back to order for a quick summary of touch-up techniques for the polyester finish. We also received a very complete packet of specifications, procedures, parts and supplies for all Kimball and Boesendorfer pianos. With detailed illustrations these are virtually a course in piano nomenclature and regulation. This is a class which I hope to see expanded in the future.

GRAND AND VERTICAL HAMMER HANGING

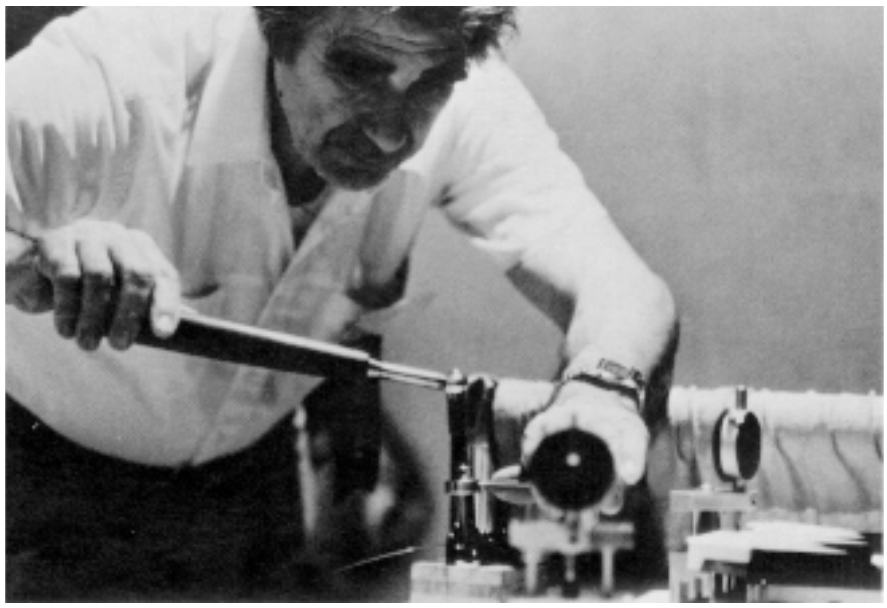
This was a very thorough class including slides and actual demonstration. Rather than rush immediatley into putting the hammers on, Ned Dodson first covered all the important preliminary steps. Checking the action placement and correcting the striking point if necessary are simple things which can make or break a hammer job. It is important to select the proper hammer since that is what determines much of the characteristic sound of a particular piano. Ned covered preparing the new shanks and setting up action and tools for efficient as well as correct hammer hanging. He demonstrated how with a straight edge, a piece of heavy thread and properly set sample hammers, one can do an excellent grand hammer installation.

He then covered the same preliminary steps for verticals and showed us his fixture for upright hammer hanging; I felt that seeing this was worth the convention. Simply put, it is two pieces of clear plexiglas which can be bolted to the action brackets and is set at the blow distance (one piece for the treble and one for the bass). The strike point of the old hammers is marked on the plexiglas as well as the side-to-side location. The old hammers are removed and new ones hung according to the lines. This way the job can be done out of the piano in the comfort of your shop and gives an extremely accurate job. Flat dampers can also be regulated since they are resting on the plexiglas "string". It's by far the best and easiest technique I've seen and I much appreciate Ned's sharing this with us.

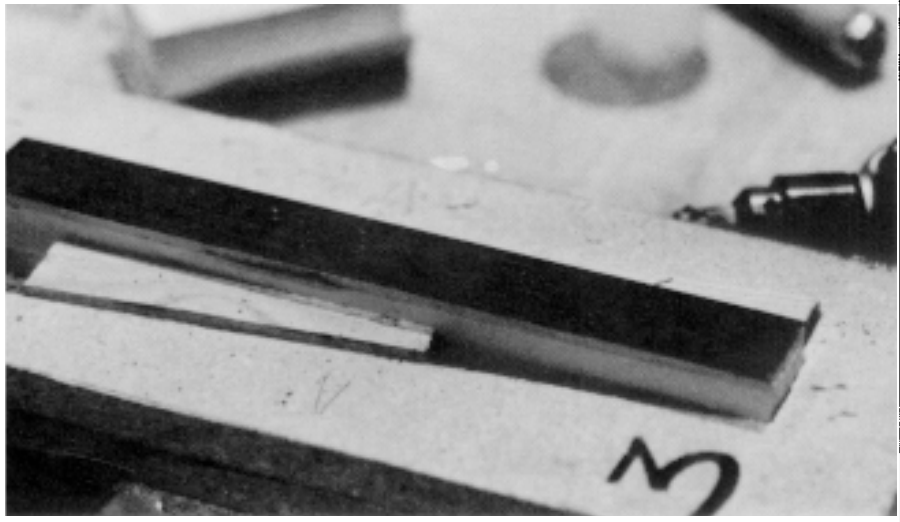
PIANO ACTIONS — DESIGN AND RELATIONSHIPS

Priscilla and Joel Rappaport continue to share generously their knowledge of the complex interrelationships in pianos and actions. Their experience and education extend far beyond that of the average technician. A benefit of this more orderly thinking is understanding component parts in their basic function — for instance, as levers. Types of leverage were explained and various examples cited how, for example, key lengths differ and what effect this has on key dip. Fulcrum points of action parts were demonstrated, as well as arcs of motion. The principle of a straight line of contact and travel throughout an action was explained, as well as how to proceed in fitting a grand action to a case. The point was made that changing even a "minor" part such as a butt felt in a vertical causes changes in how the action functions. A highlight of the class was seeing how Priscilla designed a vertical piano step-by-step.

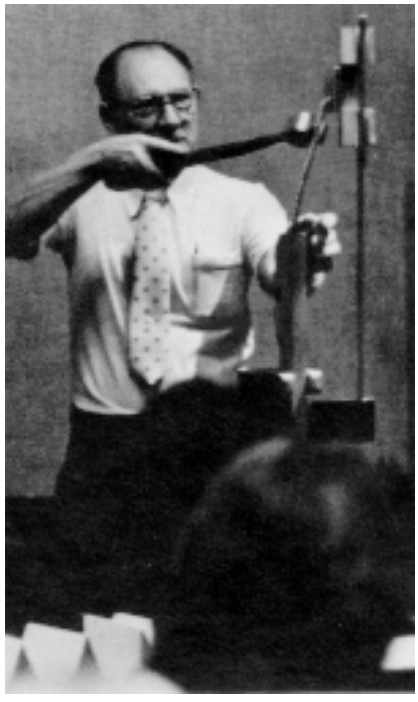
As the lively class discussion showed, there is much interest in these and related topics covered.



Joe Sciortino demonstrates the Insta-Coiler.

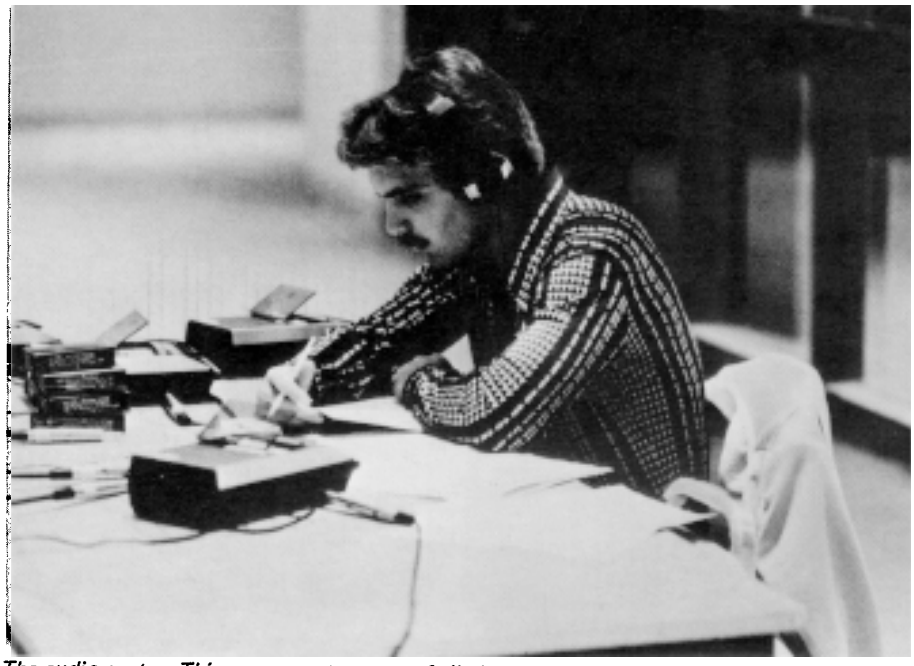


Section of a bridge ready for notching.



Ernie Juhn demonstrating vertical damper adjustment.

Lee Jedlicka conducting his key recovering class.



The audio center. This year, cassette tapes of all classes are available.

Jack Krefting.

MYSTERY OF PIANO TONE

Lou Herwig is the Wurlitzer Company's research department that, coupled with his many years of experience in the field, make him a man full of information. In this particular class he explained some of the factors which influence the tone of a piano, and gave concrete and useful advise on manipulating those factors.

Take for example the influences of the nonspeaking length sections of the string. It's generally thought that there isn't much a technician need do here—put in stringing braid where appropriate and leave duplex bars or aliquots in their original places. We learned that varying the placement of stringing braid can affect tone by muting out sympathetic vibrations of particular partials. The closer the braid is to the bridge, the more the high partials are muted; the farther away, the more "voice" the piano has. While the general position of duplexes is determined by the manufacturer, they should create a string section which is sharp to the corresponding partial in the speaking length; if this section is flat it will absorb energy and deaden tone.

Lou put a name to the phenomena of a tone which the mind perceives although it is not physically heard by the ear—this is a heterodyne.

On the subject of hammer voicing, he remarked that a harder hammer has longer contact with the string while a softer hammer has relatively short contact. Therefore a soft hammer produces more and stronger low overtones.

Students in the bridge building class using a saw to kerf a bridge prior to notching.

A topic under discussion lately is the longitudinal motion of strings, particularly bass strings, which produces a soundwave. Although there's not much we as technicians can do to change these once the string is made, we can isolate them and recognize what they are. To determine if a "harmonic" in a string is a longitudinal wave, lower and then raise pitch on the string one-half step and if the pitch of the harmonic remains constant throughout, it is caused by a longitudinal wave.

Lou talked about various factors in the structure of a piano which affect tone—lack of stability in the rim, plate stresses, and excessive downbearing on the bass bridge which ties down adjacent sections of the treble bridge. He suggested repairs or modifications for some of these situations. In summary, it was a fascinating class and a rare opportunity to consider factors about which we as technicians in the field can only guess or ponder.

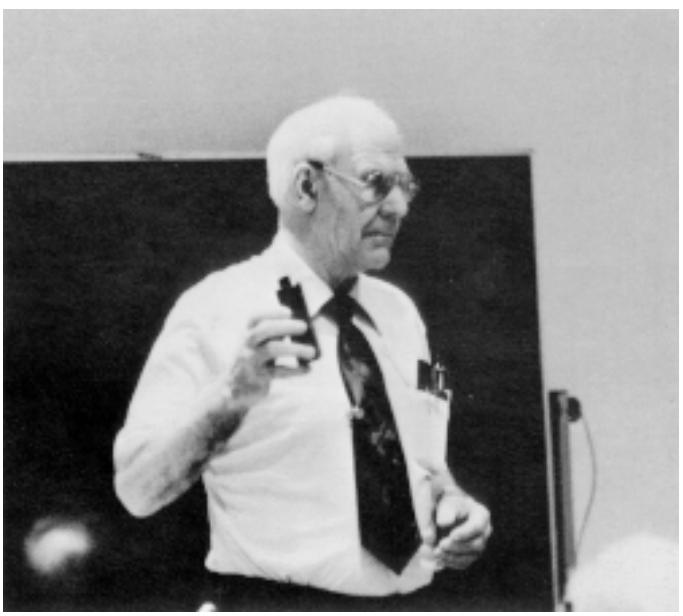
Fred Drasche demonstrating the permanence of a Teton bushing fit.

Gerhard Feldman working on the action of the Bosenderfer Imperial Grand.

Dick Flegle teaching "The Customer and You."

Many hands fitting a pinblock to a plate.

Bill Hegeman on tuning, the fine art.



Francis Mehaffey.

EFFICIENT TUNING TECHNIQUES

This is a class which really made me want to run right out and tune a piano to try some of the things discussed.

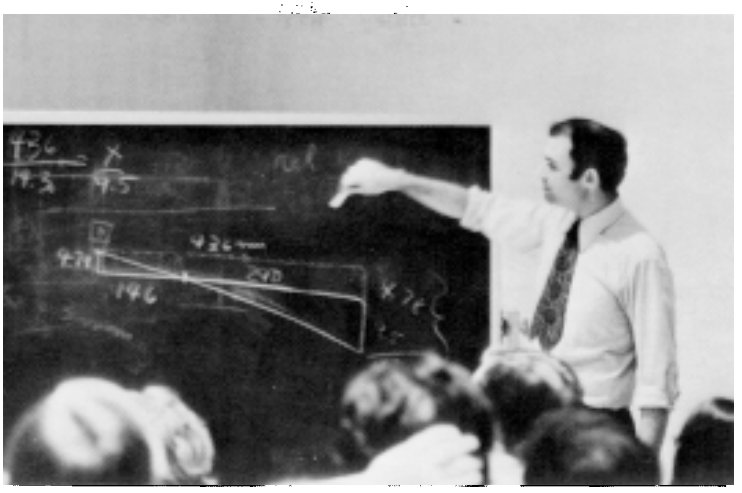
Steve Fairchild demonstrated the use of a small speaker and a pickup placed over a particular node of a string to assist in tuning the non-damped high treble. He places the pick-up over the node for the second partial of a given note and then tunes the string an octave above. The pickup amplifies the sympathetic vibrations as the fundamental of the higher string excites the second partial of the lower string. When this sound is loudest and clearest, the upper string is tuned to a perfect 2:1 octave to the lower.

Steve also showed a Sight-o-Tuner which he had modified so it can filter out any given set of coinciding partials and feed the resulting beats into a headset (or for the purposes of this class, a loudspeaker). He calls it power-assisted tuning; it is still up to the tuner to know what to do with the beats, but it makes hearing and isolating them very easy. Steve then demonstrated his perfect temperament while Dr. Sanderson explained why both men now use thirds and fourths as checks in tuning. All contiguous thirds on a tuned piano have beat rates in the ratio of 5:4. For instance, fF-A and A-C# are contiguous thirds (they share the note A). In the length of time the upper or A-C# interval has five beats, the lower third, or F-A, has four beats. Once the sound of this rhythmic relationship of 5 to 4 becomes part of your hearing repertoire, this becomes an immensely useful check. Contiguous fourths have beat rates 4:3 and in practice these intervals are nearly equal.

Steve demonstrated two temperaments for us using these among other tests. His own system yielded as perfect a result as anyone could desire. Then as Dr. Sanderson dictated the procedure, he tuned another piano and produced yet another perfect result. This second temperament is spread over two octaves and relies on octave, double octave and contiguous thirds for a starting point. There isn't space to go into enough detail to do justice to either, so I refer you to recent JOURNAL articles for more information.

MANUFACTURERS CLASSES

Several manufacturers have taken it upon themselves to provide comprehensive classes on various phases of piano service. Although each class is geared toward a particular line of pianos, the thorough detail and opportunity to see a complete regulation (for instance), transcends such minor variations. Factory representatives have a unique perspective (many have been field technicians as well) and they represent the thinking and experience of entire companies. In sheer numbers of pianos seen, and problems encountered and concentration of energy, their experience is unequaled.



Joel Rappaport explaining leverage in piano keys.

Vertical Piano Servicing—The Wurlitzer Company

This class was a hands-on, day long seminar on vertical piano regulation and servicing. Students used the venerable Wurlitzer action models and performed each operation as Bob Hill, Larry Talbot and Cliff Anderson demonstrated procedures and discussed desired effects.

Servicing the Piano in the Home—Steinway & Sons

Any chance to hear Fred Drasche talk about pianos is an opportunity with unlimited possiblities. This year he concentrated on grand piano service in the home. The class was loaded with techniques and tricks and presents a matter-of-fact approach to the repairs and refinements of grand action maintenance.

Vertical Piano Servicing—Yamaha

This year LaRoy Edwards, Jack Caskey and Kenzo Utsunomiya presented their class on vertical piano regulation. Using slides and demonstrations, they covered the subject with customary thoroughness and offered a good combination of techniques and background information. The underlying premise was that a quality vertical action can be regulated so that its repetition is nearly equal to that of a grand. This class is known for the precise and professional approach it imparts to piano service.

Grand Regulating—Baldwin

Here we had the combined talents of Cliff Geers and Willard Sims expounding the ESP of grand action regulation—evenness, speed and power. The result was a thorough class which detailed the reasons behind every procedure as well as what to adjust and when to do it. This was not just a class on turning buttons and tightening screws, but covered steps to insure that all parts are in good working order before they are regulated as a whole. For instance, emphasis was placed on bedding the keyframe and easing keys to provide a firm foundation for the top action. Several interesting factory tools which technicians can make for their own use were shown.

SPECIAL CLASSES

This year, the classes offered included two major seminars on aspects of grand piano structural repair. Both offered hands-on opportunities to students. Each presented a lifetime's worth of experience compressed into two days—as intense a situation as imaginable and a unique experience for those enrolled.

Bridge Building and Repair—Willis Snyder

A particular advantage of this class was the time spent in explaining the reasons behind every procedure and material selection. The class wasn't simply told, "Use quarter-sawn maple," but was shown what that is, why it is used, and how to work with it. Willis discussed glues with the same thoroughness, and on through bridge locating, downbearing, pinning and notching, and so forth. Between lectures and teacher demonstrations were class work sessions. The students, divided two to a work station, were given a block of laminated maple stock and over the two days transformed it into a 6" bridge section. Participants in this seminar not only learned about the subject of bridge work, but came away with a tremendous bulk of knowledge in his or her head and hands about piano work, wood work and craftsmanship in general.

Installing Grand Pinblocks—Jack Krefting

In spite of complaints that the Wurlitzer grand piano used in class didn't present enough difficulties, students here had an excellent opportunity to see and do the countless operations involved in a pinblock replacement. Of immense value was the methodical procedure: what to do first, what to leave for last and how to fit everything else in between. This class offered a chance to see each of the component jobs as they are performed and to learn what is important to each job. In keeping with the each-step-depends-on-the-previous-one nature of this work, students were given periodic quizzes to insure that no misunderstandings went uncorrected. (An added attraction was that the student with the highest score won a Falconwood pinblock.) Jack used Falconwood for this piano and was able to demonstrate the particular bit, speed and feed rate to obtain the best result with this product. It is a major undertaking to teach a class like this and everyone who attended was very appreciative.

TUNING CONCERT

Ben McElveen was introduced by Institute Director Dennis Kurk.

Ben announced that he intended to conduct the concert informally and proceeded to remove his jacket. For some it was difficult to recognize Ben without his jump suit and a few in the audience suggested he was wearing it underneath.

Ben first asked for a show of hands in the audience for people with under 15 years experience tuning, under five years, and over 15 years. The number was about evenly divided. We were then informed that he had de-tuned the piano and lowered pitch several beats that morning (the hotel pianist who played at the closing luncheon truly noticed the piano wasn't as nice and responsive as it was when he played it before, even though he was unaware of the de-tuning).

A little background on Ben: He started in the ASPT 31 years ago. His principle activity at this time is working for studios, colleges, some warranty work for manufacturers, and private clientele. He noted that he is a left-handed tuner, which made it nice since he could face the audience while tuning. He is an aural tuner but has respect for the electronic advances made in the profession and admiration for the newer innovations in electronic tuning. He has been also a working oboist for the past 30 years and so has an empathy for the performing artist.

Ben aimed at making this tuning concert a fun experience and put the audience at ease, inviting questions at break points. He described a concert tuning as a tuning put on a piano after it is tuned, and we learned much from his stories relating to dealing with concert pianos and artists. His aim with this performance was to leave us all with the feeling, "I can do that!"

With that, he went into the tuning. Often he would make a comment we could all relate to. As he went into the "midnight zone" (the keys below A^1), he exclaimed, "You can *see—watch* these beats!"

After the first time over, he took a break, answered questions, then removed his tie and rolled up his sleeves for the second go round. At 5:10 he asked for a pianist from the audience to play us a tune. It was a marvelous finale to the convention. As I left, I said to myself, "I can do that!"

—Wayne Matley

SPECIAL EVENTS

Early arrivals at the convention found plenty of interesting things already going on. Sunday afternoon after Council session two movies were shown. The first was a film on bass bridge capping featuring Willis Snyder (filmed and produced by Ernie Juhn). It not only covered the subject but also set a tone of skilled and professional craftsmanship which was a credit to all involved. The second film, produced and featuring Sam Pearlman and Sid Stone, covered vertical action restoration. It showed in detail how and why to replace, repair and clean all parts of a vertical action from brackets to butt felts. Both films are valuable training tools for the years to come.

There was hardly time for dinner before the next event. This was a lecture-recital given by Owen Jorgensen on historical temperaments. Mr. Jorgensen demonstrated how music from a particular period sounds on its historically corresponding temperament. It was a clear demonstration of not only differences between systems, but color changes in the varying keys of each temperament.

The next morning the Chapter Management Committee held its Chapter Workshop Breakfast. Three speakers gave those who attended ideas and suggestions for managing three areas of chapter activity: Don Santy covered membership recruitment, Susan Graham spoke about newletters, and Jim Coleman explained the administration of the new tuning exam. Ron Berry, as chairman of the Chapter Management Committee, deserves a vote of thanks for organizing this opportunity for chapter officers to expand and refine their skills.

Monday night the convention officially began with the Opening Assembly. After President Don Morton welcomed us all, he presented the Golden Hammer Award to Don S. Galt for his years of service to the Guild, particularly as JOURNAL editor.

Following this was a program of German dancing and then we all adjourned to the exhibition center for the ribbon cutting and our first chance to see what new and fascinating things the manufacturers and supply houses had to offer.

The banquet on Tuesday evening was a truly elegant affair, highlighted by the Raddisson "Golden Strings," who serenaded the diners with many popular favorites. The delegation from the Japanese Association of Piano Technicians was introduced, and one of the members treated us to a lively rendition of American folk songs on the harmonica.

The closing luncheon tended to be a giddy affair. Everyone had been attending classes so seriously all week it was good to have this last chance to relax and enjoy each other's company. Don Morton was presented with a plaque and his second past president's pin in honor of his leadership over the past two years. Henry Baskerville and Frank Desmond received plaques for their work as RVP. The new Executive Board was introduced by Bob Russell, our new president. Institute instructors received a well-deserved round of applause, and Jack Sprinkle presented Willis Snyder with the first Ulys S. Rogers award for outstanding Institute Instructor.

Local chairman Dick Flegle opened the entertainment with a testimony to the usefulness of Guild coasters and then introduced the winners of the Auxiliary talent contest. As mysterious music filled the room, "Shimmering Jewel" appeared and performed an

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exotic Mid-Eastern dance. (She later reappeared as Jewell Sprinkle.) Lucille and Loren Larsen performed several beautiful duets with Ginny Russell accompanying at the piano. Then it was time for the Piano Technicians Guild Barbershop Quartet Times Five as at least 20 voices serenaded us in perfect harmony, and, as the pianist from the Golden Flames took over at the Boesendorfer, led us in the traditional "Auld Lang Syne", the close to yet another great convention.●

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BEN McKLVEEN

NORMAN NEBLETT

ERWIN OTTO

Hall of Fame-

WILLARD DAVIS

WILLIAM STEGEMAN

Golden Hammer-

DON S. GALT

Special-

W. DON MORTON, President's Plaque

WILLIAM J. SMITH, Craftsman of the Golden Hammer

GEORGE DEFEBAUGH, Journal Reader for the Blind

DON MORTON

New Organization Formed - IAPBT

A long cherished hope of many piano technicians and piano builders around the world has now become a reality. Through the joint efforts of the Japanese Association of Piano Technicians, the Piano Technicians Guild and Mr. Klaus Fenner of Germany, an international organization of piano builders and technicans was formed on July 25, 1979 in Minneapolis, Minnesota.

The meeting was preceded by an international luncheon hosted by the Piano Technicians Guild. Present were 14 representatives from the Japanese Association of Piano Technicians, Klaus Fenner from Germany, the Board of Directors of the Piano Technicians Guild, and members of the International Relations Committee of the Piano Technicians Guild. Several other technicians were also present becuase of their deep personal interests in the formation of an international organization.

The meeting proceeded on a high level of cooperation with all representatives contributing toward the formation of a working structure on which to begin building an international association. Because of the far reaching and meaningful influence this association can generate, only those organizational guidelines deemed necessary to first, establish, and second, to make it funtionable, were adopted at this first meeting.

An invitation is extended to all national piano building organizations and/or piano servicing organizations considered representative of ther countries throughout the world to become members of the *"International Association of Piano Builders & Technicians"* (IAPBT). We believe the more separate organizations involved, the broader and more representative will be the international association. We welcome any inquiries and suggestions pertaining to the purposes and objectives of IAPBT.

Please address all correspondence to *IAPBT, 113 Dexter Avenue North, Seattle, WA 98109.*●

MINUTES OF THE INTERNATIONAL ASSOCIATION OF PIANO BUILDERS AND TECHNICIANS

July 25, 1979

A meeting for the purpose of organizing an international association of piano technicians and piano builders was held on Wednesday, July 25, 1979 in the Radisson Downtown Hotel, Minneapolis, Minnesota, USA.

CALL TO ORDER The meeting was called to order by Don Morton at 12:30 p.m.

VOTING MEMBERS By consent of all present the following motion was adopted:

"Voting members of this session shall be:

1. The delegation from Japan.
2. The executive board of the Piano Technicians Guild.
3. Members of the International Relations Committee of the Piano Technicians Guild.
4. Klaus Fenner of Germany.

Those present who are not a part of the above designated voting members shall be permitted to audit the session by attending but without the right of participating in the business."

TAPE RECORDING By general consent the assembly ordered that the session be recorded on tape.

PRESIDING OFFICER Proposals were made for a joint presiding team composed of the presidents of the piano technicians associations of Japan and the USA.

On motion of B. Russell the assembly approved Don Morton as the presiding officer for the session.

SECRETARY AND PARLIAMENTARIAN By general consent A. Thompson was appointed to record the minutes of the session and serve as parliamentarian.

MOTION TO ORGANIZE Formation of an international association was discussed and the following motion proposed by D. Denham was adopted:

"That we establish an international association of piano technicians and piano builders."

TAPE RECORDING DISTRIBUTION By general consent tape recordings of the session are to be sent to any interested organization requesting a copy.

BYLAWS Copies of proposed bylaws were distributed for review and discussion. The proposed bylaws were debated and acted upon as follows:

ARTICLE II OBJECTIVES AND PURPOSE

D. Evans moved adoption of Section A Purpose which was adopted unanimously.

"*Section A Purpose* The purpose of the association shall be the formation and maintenance of a world-wide fellowship of piano technicians and builders."

After debate and amendment M. Sakuarai moved adoption of Section B as amended:

"*Section B Objectives* The objectives of the association shall be to provide a means for an encourage freedom of exchange of technical information and any other subject of related interest, or for action by the members, and for cooperation in scientific research and improvement of quality of pianos."

By general consent the assembly agreed that exchange of technical information would be on a voluntary basis.

ARTICLE I NAME AND HEADQUARTERS

After discussion on the subject of a name for the association, K. Fenner moved adoption of the following:

"The name shall be THE INTERNATIONAL ASSOCIATION OF PIANO BUILDERS AND TECHNICIANS"

Consideration of a headquarters was postponed to a later time.

ARTICLE IV MEMBERSHIP The assembly discussed qualifications and procedure for acceptance into membership.

C. Huether moved the following which was adopted unanimously:

"*Section A Organizations* The membership shall be composed of associations and organizations whose purpose and functions comply with the name of this association."

After considerable discussion on the subject of procedure for admitting new member organizations the following was approved unanimously by general consent:

"Organizations or associations wishing to become members of the International Association of Piano Builders and Technicians must be formally voted into membership by the existing members."

"The existing members shall be The Japanese Association of Piano Technicians and the Piano Technicians Guild."

K. Fenner agreed to notify the German Piano Makers and Europiano of the formation of the new international association.

ARTICLE V OFFICERS After discussion on election of a president B. Russell presided over the election of Nobuo Tanaka and Don Morton to be joint presidents until the next in-person session of the Association. By general consent it was agreed that Don Morton would continue as the presiding officer for the rest of the session.

ARTICLE VIII FINANCES The following three motions proposed by C. Huether were adopted:

"Each member organization shall be responsible for its own expenses in regard to participation in this Association".

"That the home office of the Piano Technicians Guild be used as the communications center for the International Association of Piano Builders and Technicians".

"Official contact persons on behalf of the Association shall be the joint Presidents".

INCAPACITY OF A PRESIDENT W. Kerber moved the following motion which was adopted unanimously:

"In case of incapacity of either president the next in the chain of command in the affected organization shall fill the vacancy in that position. This rule to be effective during the period of joint presidents in office".

MEETINGS By general consent it was agreed that meetings of the officers may be held in person, by mail or by telephone.

The assembly also agreed that whoever initiates a meeting of the officers shall arrange for interpreters.

On motion of S. Stone the following was adopted:

"Each member organization shall have three delegate votes at the next meeting of the International Association of Piano Builders and Technicians. The votes may be carried by one, two or three delegates".

ORGANIZATIONAL MEETING PAPER The attached handwritten paper stating the basic accomplishments of the session was then read to the assembly and signed by those present.

CONGRATULATIONS AND THANKS Presiding officer Don Morton thanked the assembly and guests present for a productive session.

ADJOURNMENT The session adjourned at 3:25 p.m.

BEN MC KLVEEN

IN THE FIELD...

"What's all that junk in the back of your car, mister?"
"Special tools and supplies."
"Like what?"
"Stick around and I'll show ya."

This dialogue picks up where I left off in my August column, which was a discussion of tools and supplies that I carry in my tool case. This month we will deal with the supplemental equipment that I carry in my car. These items are important and very useful but may not be used every day.

A vacuum cleaner is a vital tool for me. Many years ago General Electric produced a small tank-type machine which was designed to clean draperies and upholstery. It is about one-half the size of the average floor cleaning machine. I bought one when I started my business and inherited a second machine about 15 years later. I have vacuumed tons of dirt out of pianos with these cleaners during my career.

Another feature that I like in addition to its convenient size is the reversible hose. It can be removed from the vacuum end and put on the exhaust end to become a blower — wonderful for cleaning out actions. This is best accomplished outside the home on a porch or in a garage where the dirt can be dispersed without harm to furnishings. Occasionally one can clean the soundboard of a grand piano by gently blowing the dust and lint down into the bass end of the piano. Then with reversal of the hose, the accumulation can be vacuumed into the tank. This operation requires three things to be successful — speed, skill and discretion. Never perform this chore when a member of the household is present. When it is done, it should be done with dispatch and with a skilled control of the air stream so the dirt and dust are not blown all over the room.

If I had to buy a vacuum cleaner for my work today, I would look for a good rebuilt tank or canister machine with a cloth bag to contain the dirt, and the reversible hose feature that allows it to blow a stream of air as well as vacuum. I would avoid the very modern complicated machines with automatic cord winders, full bag ejectors and the like. These features are hard to maintain and repair and get in the way of simple efficient operation.

Everyone in piano service needs wire for broken strings from time to time. I carry a small metal chest with quarter-pound reels of treble wire in half sizes from #13 thru #22. With this selection of wire I can splice a string or replace it completely, whichever seems better at the time. In addition to the treble wire, I carry a double set of universal bass strings in a fiber "movie reel" container. As with treble strings I prefer to splice when I can. In the case of broken bass strings on good quality pianos, if I must replace a string for some reason, I try to duplicate the original string by having it tailor-made by a string manufacturer. This is time-consuming and costly, however, and the universal strings fill a definite need at times.

One of the most useful tools that I carry is the "zapper". This invention of Francis Mehaffey is a tool to ease center pin bushings quickly and easily. It is built into a standard kitchen recipe box and consists of a stepdown transformer connected to a pair of tweezers. Passing an electric current through a center pin heats the pin enough to singe the bushing cloth and this relieves sluggishness. In the last few years we have had a rash of new pianos which have developed tight whippen flange centers causing unreliable repetition. The "zapper" has saved me untold hours in correcting this problem and it has also saved my clients a great deal of money. In a future article I will discuss the use of this tool in more detail and present a diagram and a parts list for its construction.

The tools and supplies listed above are the most often used items that I carry in reserve in my car. There is also a collection of things that I carry and use from time to time that are peculiar to my way of operating my business. For example, I still have a few pianos that turn up with plastic elbows, so I carry a few dozen snap-on replacements tucked away out of sight. Also stored away are various sized C clamps, a cabinet clamp or two, a small assortment of wood blocks and strips of veneer. These are used for action and cabinet repairs that become necessary, the success of which is sometimes more important to the client than the tuning.

There are many pianos in use where the casters, and especially the caster sockets, are being de-

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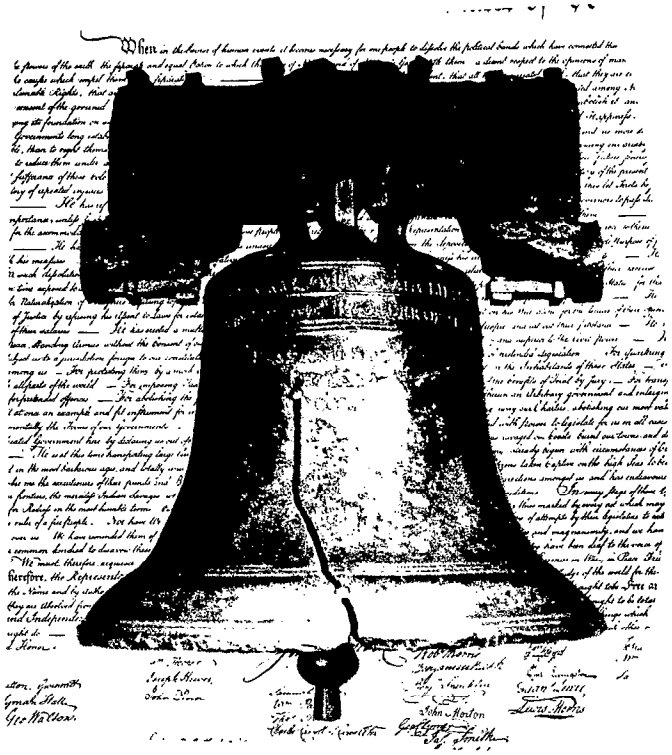
stroyed. This happens as the pianos are rolled up and down school halls and over door sills in the hands of exuberant students. So, I carry some replacement casters and sockets and make a pitch to promote the use of dollies with school pianos.

Two items that serve a useful function in and sometimes out of my car are two piano moving pads. They cover and protect and hide from sight any valuable items that I carry since I drive a station wagon. They pad actions in transit and prevent an amazing amount of wear and tear on the inside of the car.

The discussion this far covers the backup equipment that travels with me each day. There are other things worthy of mention back at the shop which are needed sometimes. These include such big items as a piano dolly, a piano tilter, large piano clamps, additional piano pads and backup tools from the shop — an electric drill, heat gun, bending pliers and the like. All of these things help me run my business. They may be useful to others also, but by no means do they represent a standard or a norm. Each technician must examine how he operates and from time to time make additions to his supply of tools and equipment. Equally important is the need to make deletions. Often we tend to carry more than we need. If a tool has not been used for a year it goes back to the shop.

Everything that I carry is oriented toward one goal — to render the best and most complete service I can while I am working on a piano.

The national convention in Minneapolis this last July offered classes which illustrated the use of new, different or unusual tools. The supply houses were there with hundreds of tools to be examined. Conversations in the corridors abounded with the exchange of information regarding tools, materials and techniques. Our profession is not a static thing. Some change is always possible, so what is carried this year may not be the same as what will be carried next year. The evaluation of these tools, materials and techniques promote change and change is sometimes necessary for improvement.●



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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 in 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 as The Journal goes to print some weeks ahead of receipt.

The following points are scored for signing up the various ratings:

Craftsman - six points. Apprentice - five points. Allied Tradesman - four points. Associate - three points. Affiliate - two points. Student - one point.

When you have a total of 24 points you become a member of the President's Club; all others are Bell Ringers.

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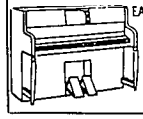

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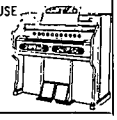

LUELLYN PREUITT

Auxiliary Exchange

Greetings! This writer is going to take advantage of her position and claim privilege of being the first to officially greet you under our new name of "Auxiliary Exchange." This change of column name was voted into being at the Auxiliary Council Meeting last July in Minneapolis. We believe it will more fully exemplify our purpose as an aid to the Piano Technicians Guild, and at the same time provide an outlet for all goals of the Auxiliary.

The Auxiliary "umbrella" now encompasses, according to Article III, Section I, of the Piano Technicians Guild Auxiliary Bylaws, "an interested person, 16 years or older, sponsored by a member in good standing of the Piano Technicians Guild, Inc." Note that the only wives this might exclude are those child-brides of 15 or younger! If this is discrimination, they must form a group and sponsor an amendment change! Seriously, we hope you will like our new column name, and that you will sponsor and support our endeavors.

Congratulations are in order to each new officer of the Auxiliary. Some are carrying on responsibilities of previous years, others are moving to new posts, and some are coming on the Board for the first time.

It is critically important for use to be infused with new blood, in the form of officers who have not served before in a national capacity, just as importance is given to retaining some who have been there for a while. Thus we gain new enthusiasms and ideas, and retain know-how and continuity of purpose. By retaining the immediate past president as a member of the Board, we also have a resource person of much knowledge and sympathy!

We confidently expect to hear from all our officers, new and old, for contributions to this column during the coming year.

The newly elected president of the Piano Technicians Guild Auxiliary, Jewell Sprinkle, writes as follows:

'As your new president, I send greetings to all of you. We had a superb convention in the beautiful Twin Cities of Minneapolis and St. Paul.

"We made many new friends and at the same time were saddened by the absence of those whom we were accustomed to greeting in former years. We look forward to seeing again all of our new friends and acquantances, and hope to see those who were missed.

"Our hats are off to all the Central West Region Chapters who made our visit so enjoyable.

"Your Auxiliary officers this year are as follows:

PRESIDENT
JEWELL (Mrs. Jack) SPRINKLE
6033 N. 19th Road
Arlington VA 22205

FIRST VICE PRESIDENT
JULIE (Mrs. Ron) BERRY
6520 Parker Lane
Indianapolis IN 46220

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79 Furnace Lane
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Clifton NJ 07012

TREASURER
DESSIE (Mrs. Paul) CHATHAM
724 E. First Street
McPherson KS 67460

RECORDING SECRETARY
BERT (Mrs. Walt) SIEROTA
5201 Whitaker Avenue
Philadelphia PA 19124

"Also retained on the board is Immediate Past President, HELEN (Mrs. Walter) PEARSON. Appointed as Parliamentarian was GINGER (Mrs. James) BRYANT. Retained as Auxiliary Exchange Editor for The Journal was LU (Mrs. Ernest) PREUITT.

"Our Auxiliary banner has been misplaced. If anyone has any knowledge of its whereabouts, please contact me. We last had it in Cincinnati (July 1978).

"In the first mail upon returning home, I received a letter from our busy First Vice President Julie Berry. I believe she has Paul Bunyan's tuning hammer and has begun setting a solid temperament for the Auxiliary. Let us all join in WELCOMING those who will give July a fine concert tuning for the Auxiliary."

—Sincerely, your president, Jewell

Here is a report of social activities of the Auxiliary during the Minneapolis convention, supplied by Arlene Grimley of Mount Pleasant, Michigan. Arlene was asked by Immediate Past President Helen Pearson, to be the reporter for this event. She graciously responded in the affirmative, and here is Arlene's account of all our activities during the hectic five days. It took some real dedication to keep up with all this, and we thank Arlene for her interesting and factual account of our activities.

"From the chapel service on Sunday morning to the closing luncheon on Friday, activities, classes, and shopping kept auxiliary members well occupied while their spouses increased their knowledge of and skills in piano technology.

"Thanks go to Marge Evans for last minute planning of the chapel service. Those who attended enjoyed a prelude by our president, Helen Pearson, a vocal solo with trumpet obligato by Belva and Richard Flegle, and congregational singing and reading.

"Early arrivers had the chance Monday morning to learn the art of silk flower making from Judy Cummens and Diane Ocel of the CREATE IT hobby shop, and of stick weaving from Auxiliary member Judy White. Such things as belts, placemats, purses, pillow tops, and wall hangings can be made with stick weaving.

"An excellent three and a half hour tour of the Twin City area included

stops at the beatiful Como Park Conservatory, famous throughout the country for its colorful, varied and well-arranged floral displays; the state capitol so that camera enthusiasts could take pictures of the dome inspired by Michelangelo's St. Peter's; and Minnehaha Falls, made famous by Longfellow in his 'Song of Hiawatha'. A few other places seen on the same tour were the campus of the University of Minnesota, famous Summit Avenue, Lake Harriet, Lake Calhoun, Lake of the Isles, and the tomb of the late Hubert Humphrey.

"One of the highlights of the Auxiliary Presidents Tea was the awarding to Esther Stegeman of an honorary life membership in recognition of her significant contributions to the Auxiliary through the years. Marie Miller presented her a wall hanging bearing the words 'Love, Joy, Peace, Longsuffering, Gentleness, Goodness, Faith, Meekness, Temperance', as nine of her friends elaborated on these words. Another highlight was Keith Huffman's rendition of three viola numbers, accompanied by his wife Jean. Two Japanese ladies, Mrs. Yoneko Gotada and Mrs. Schizuok Nakada, whose husbands were among the group of Japanese technicians at the convention, were special guests at the tea. The beautiful carnations presented to all the ladies and the delicious assorted cakes and punch added to the delight of the occasion.

"For those who like to travel by the armchair method, there was an interesting film on Tahiti by Guild member William Balamut, and slides by Ann Doerfler on her recent trip to Europe with 37 other technicians and their wives. Thanks, Bill and Ann, for sharing your trips with us. You made us wish we had been there with you!

"The variety talent show, emceed by Doug Denham and featuring Ginny Russell, Jewell Sprinkle, Lu Preuitt, Roselyn Davis, Lucy and Loren Larson, Agnes Huether, Virginia Seller, Dayle Foli, and Helen Pearson, included piano solos, vocal duets, readings, belly dancing and skits—from the sublime to the ridiculous! Gals, begin planning now for **your** part in next year's talent show!

"For those auxiliary members who help their husbands in their work were classes on 'Piano Action as a Series of Levers,' by Martha Riley, 'Helping Your Spouse in Business,' by Ralph and Shirley Kingsbury, and 'Appraising Pianos,' by Barbara Martin.

"Marion and Virginia Seller's organ and voice recital at the Olivet Congregational Church in St. Paul attracted two bus loads of Auxiliary members and their spouses.

"Downtown shopping areas reached by numerous skyways tempted many ladies, while others took advantage of the 40th Annual Aquatennial events near the hotel. Many considered the Betty Crocker tour a 'must'. The convention banquet featuring the Golden Strings and the closing luncheon added their share of pleasure for the ladies as well as the men.

"Auxiliary members were delighted with the new EASY DOES IT IDEA book. Our thanks go to Ginny Russell and her helpers, Julie Berry, Carol and Bruce Hale, Brenda Preston, and the Indianapolis Auxiliary. Books are still available from Ginny. *(A note from the editor here. While recognition is certainly due all of the above mentioned members, it should be pointed out that the original IDEA came from Helen Pearson, at the time she entered office as president of the auxiliary. Helen certainly deserves our thanks for this idea, and those of you who have the book and are reading it will surely observe the many interesting and useful hints which Helen contributed to the creation of this book.)*

"Featured at the Auxiliary Installation Luncheon was Professor Russell Harris of Hamline University, with his presentation of a little known instrument, the hurdy gurdy. For his concluding number, the audience joined in singing *'There's No Place Like Home!'* The Installation of new officers was executed by Lu Preuitt with her usual finesse. Gifts from the Auxiliary and the board as well as the lovely grand piano quilt, started by members at the Cincinnati convention and finished by Margaret Frazier during the year, were presented to outgoing President Helen Pearson in appreciation for her untiring efforts as president these past two years.

"To Virginia Seller and her many helpers from the Twin City and Minnesota-North Iowa auxiliaries, we give our special thanks for making our stay in Minneapolis so enjoyable. The goodies provided throughout the convention, the lovely centerpieces depicting Minnesota, the surprise packets and gifts at the installation luncheon, as well as the many 'unseen' hours spent in planning, were all very much appreciated.

"Help to make next year's convention in Philadelphia even better by YOUR presence and participation. We'll be looking for you there!"

Our thanks to Arlene for her delightful and accurate description of our convention. I have tried not to change, nor add, nor delete. To do such to a lady who taught school more years than I would probably put me back in the "freshman" class. Nevertheless, I did delete a word, or add one, or change one, here or there, which is an editor's prerogative. Again, to Arlene, our thanks.

At the Auxiliary Council meeting in Minneapolis, Dessie Cheatham, Auxiliary Treasurer, presented a memorial service for Auxiliary members who have passed on during the past year. Her prayer for those beloved ones was appreciated by all who heard it and is worth repeating here: "Dear God, You are leading our loved ones through the changes of time to the rest and blessedness of eternity. Be near to comfort and uphold us. Make us to know and feel that your children are precious in your sight and will live with You forever. We are thankful for the lives You have given us and now help us to resign them unto You. Please assist us to bear our trials with fortitude and hope." She then asked for a moment of silent prayer for all deceased members of the Auxiliary, including Bertha Short, Evelyn Wagner, Jane Jones, and others who we know personally. It was a moment of distinct togetherness for all who were gathered there.

Here comes Julie with "Another Reason to Join the PTG Auxiliary!" As we started home from the Minneapolis convention, I was filled with gratitude for the wonderful organization which had brought us all together. More specifically, I owe much to the PTG Auxiliary. The Auxiliary plans events for the people at PTG conventions and seminars who aren't piano technicians and that group is a real potpurri of backgrounds, hometowns, ages, occupations, and interests. So the Auxiliary is trying to offer a schedule of activities with everyone in mind. One interesting trait that makes our Auxiliary strong is that we are not easily labeled and pigeonholed. This also practially guarantees that a conversation which you begin in a PTG Hospitality Room could touch on any thousands of fas-

cinating topics. This group is definitely just too exciting to pass up. So I'll tell you how simple it is to become a member. If you don't have an official membership application, just print your name and address (including zip) on a piece of paper. Include the local Auxiliary chapter for your area (if there is one) and the name of the Guild member (spouse, friend, relative) who is sponsoring you. Write out a check payable to the "P.T.G. Auxiliary" for six dollars (that includes your first year's dues). Mail the application and the check to the PTGA Treasurer, Dessie Cheatham, 724 E. First, McPherson, KS 67460."

I'm deliberately going to hold the minutes of Council meeting, which I have already received from our most efficient recording secretary, Bert Sierota, until next month. Perhaps I just don't want to push The Journal editors past the limit of space alloted to us, although I believe we are well within our scope this time. However, there is another reason. That is, there ought to be time for everyone involved to send to the editor of AUXILIARY EXCHANGE a notice of a meeting, a notice, or an idea, which might be of value to this column. Our deadline is now 45 days in advance of the publication date of the magazine. That is, if we wish an article to appear in the December 1979 issue of The Journal, that article must be in the hands of the AUXILIARY EXCHANGE editor no later than October 5, 1979, so she can send it in by the 15th. What I'm trying to say is, March 1980 Journal copy is due to this editor by December 31, 1979. Then she can meet her 45 day deadline of January 15, 1980.

You may not believe this, but it is true. It takes approximately 27 days for a copy of The Journal to be delivered from the west to the east coast. Hooray for the United States Post Office! Let's all give it our best effort.

In conclusion—and hopefully—you will see this in September, let's work together for the advancement of not only the Piano Technicians Guild, but let us also work together for the advancement of the Piano Technicians Guild Auxiliary so that the Auxiliary may be what the name implies—an AID. ●

LETTERS

Many thanks to PTG for presenting me with "Man of Note" at the Minneapolis Convention on July 24th, along with Norman Neblett and Ben McKlveen.

I would like to express my gratitude to all officers and members way back to 1942.

I would NOT be where I am today if it wasn't for PTG.

(signed) Ralph A. Kingsbury

My heartfelt thanks to the Hall of Fame Committee and to PTG for electing me to the Hall of Fame, and to Jack Sprinkle for presenting this award to me on opening night of the Minneapolis convention.

I sincerely appreciate this recogition and shall continue to do my best for PTG.

(signed) William Stegeman

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BOB RUSSELL

Hooked!

The Booster and Restorer Club points for the membership year July 1979 - July 1980 were calculated through July 18th this year and added to the totals for the 1979 convention. All new members processed by the Home Office following the convention are being credited for the new membership year 1979-80.

There were a few new members added at the last minute which changed the final count for the awards as follows:

PRESIDENT'S CLUB AWARDS

SELLER, MARION	43 points	Twin Cities
BITTINGER, DICK	39	Reading-Lancaster
DRAINE, ROBERT	39	Boston
McVAY, JAMES	35	Vancouver, B.C. Canada
TAPP, KENNETH	33	Memphis
HANSON, FRANK	28	New Hampshire
CUNNINGHAM, JESS	27	New Orleans
HARRIS, VAUGHN	27	Las Vegas
BETTS, DAVID	24	Boston
SCHOPPERT, ROBERT	24	South Dakota

RUNNERS UP

JOSEPH, PAUL	21 points	Philadelphia, PA
BASKERVILLE, HENRY	19	Richmond, VA
HAINO, HENRY	18	Western Michigan
DESMOND, FRANK	17	Dallas, TX
MARCIANO, BILL	16	New Jersey
GARRETT, JOSEPH	16	Portland, OR
DANTE, RICHARD	15	Cristofori Bortherhood, NY

ADDITIONS and CHANGES TO AUGUST BOOSTER CLUB REPORT

CATE, ALLAN	2	Los Angeles
DAVIS, ROBERT	1	Modesto
PTERSON, GERLAD	13	Western Michigan
STANWOOD, DAVID	5	Boston

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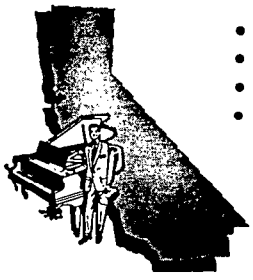

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SID STONE

Future Articles

Your Vice President and Regional Vice Presidents are especially charged with the responsibility of Guild membership promotion, and this page is only one effort to accomplish this.

The Regional Vice Presidents will be at the membership table at state and regional conventions in your area, and perhaps at some local seminars.

Furthermore, the Regional Vice Presidents are being asked to write an article for The Journal on membership. In the October issue, Northeast Regional Vice President Dick Bittinger will discuss student membership as a follow-up of a conversation with Sam Pearlman in Minneapolis. Many of us are concerned about the number of untrained or illtrained people posing as piano tuners and cheating the public. If every Craftsman member of the Guild would take on one student and give that student proper training, the future of our profession would be much brighter and we all would be better off—customer, student, technician and the Guild.●

New RVP

Within a few short weeks following our successful convention in Minneapolis, we were saddened to learn of the death of Sam Pearlman, newly-elected Western Regional Vice President. Sam's affiliation with the Guild goes back a great number of years and he will be greatly missed.

In accordance with the Piano Technicians Guild Bylaws and Regulations, a mail ballot was conducted by the Executive Board.

We are pleased to announce that Dan Evans of North Hollywood, California, was elected to fill the vacancy on the board. We know you will give your support to Dan as he takes over his new position.●

Welcome New Members!

The following members were processed by the Piano Technicians Guild during the month of July.

CRAFTSMEN

BROUGHTON, JULIUS N.
8 Dewey Street
Charleston SC 29403
Charleston Chapter

BUCK, EDWARD J.
Sullivan Road, Box 111
North Billerica MA 01862
Boston Chapter

CANNON, JAMES D.
33-B Park Drive
Woburn MA 01801
Boston Chapter

EPPERSON, KATHLEEN
160 South Klevin # 21
Anchorage AK 02090
Boston Chapter

GITCHEL, ROBERT L.
8135 Waylee
Portage MI 49801
Western Michigan Chapter

HABERG, DAVID J.
12 Radford Road
Princeton MA 01541

IKEDA, MARGARET
56 Highland Avenue
Cambridge MA 02139
Boston Chapter

JOHNSTON, CURTIS
54 St. Stephens Street
Boston MA 02115
Boston Chapter

KUPKA, JOHN E.
116 Elmora Avenue
Koose Creek SC 29445
Charleston Chapter

MC CORD, DAVID B.
5 Appleton Street
Boston MA 02116
Boston Chapter

MORIARTY, MARK E.
RFD # 1, Box 95E
Ludlow VT
Boston Chapter

PACKARD, NANCY
1776 South Street
Bridgewater MA 02324
Boston Chapter

PARSON, TREMAINE
Pierce Hill Road
Lincoln MA 01773
Boston Chapter

PEASE, BARBARA
1 Waban Street
Wellesley MA 02181
Boston Chapter

APPRENTICE

CARLSON, PAUL
7759 Olympia St.
Golden Valley MN 55427
Twin Cities Chapter

CARRAHER, THOMAS M.
RD # 2, Box 221
Mt. Joy PA 17552
Reading-Lancaster Chapter

HARRIS, DON G.
22722 Cypress St.
Torrance CA 90501
South Bay Chapter

KLEIN, SALLY I.
74 Devon Road
Norwood MA 02062
Boston Chapter

GRILLO, ROBERT A.
33 Ridgemont Street
Allston MA 02134
Boston Chapter

NASH, RAY T.
81 Pine Street
Swampscott MA 01907
Boston Chapter

PERRY, MARK J.
3018 Clinton Ave. # 3
Minneapolis MN 55408
Twin Cities Chapter

SCHWENDEMAN, MARY L.
9 Colborne Road, # 16
Brighton MA 02135
Boston Chapter

TOPPA, FRANK A.
323 Jonathon's Way
Brewster MA 02631
Boston Chapter

TRAYLOR, JEAN M.
48 Parker Street
Marshfield MA 02050
Boston Chapter

ASSOCIATE

HAYNES, JASPAR L.
P.O. Box 3641
Charlottesville VA 22902
Blue Ridge Chapter

RILEY, WILLIAM D.
Rt. 2, Box 190A
North Branch MN 55056
Twin Cities Chapter

STUDENT

HEAPS, LEWIS K.
86 S. 900 W.
Provo UT 84601
Utah Valley Chapter

HUNSAKER, GORDON F.
297 East 1140 North
Orem UT 84057
Utah Valley Chapter

MILLS, BILLY W. JR.
P.O. Box 3996
Charlottesville VA 22901
Blue Ridge Chapter

ROSAS, THOMAS P.
P.O. Box 4424
Stockton CA 95204
Modesto Chapter

STEHLER, DONNA D.
1984 Pondview Crescent
Uniontown OH 44685
Cleveland Chapter

STRUTHERS, ELIZA
2319 E. Stadium Drive
Stockton CA 92505
Modesto Chapter

WILKES, MICHAEL W.
5959 Ft. Caroline Rd. # 2702
Jacksonville FL 32211
North East Florida Chapter

RECLASSIFICATIONS

CRAFTSMEN

BALIGAN, ARLIN
Rhode Island Chapter

BELL, ROBERT H.
Cleveland Chapter

CASE, ROBERT
Rhode Island Chapter

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Stated value on parcels of samples should never exceed $2 to avoid parcel being held up in customs.

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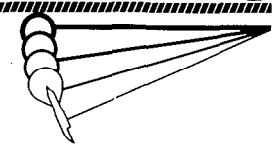

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WANTED — Tuner-technician. Write: **Emert S. Rice, Rice Music House, P.O. Box 1235, Columbia SC 29202**

WANTED — Organ technician fulltime for music dealer in sunny Florida. Write: **Bobb's Pianos & Organs, 304 Hallandale Blvd., Hallandale FL 33009, or call Mr. Bobb (305) 456-7800**

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WANTED TO BUY — Advertising book issued in 1923, by American Piano Co., "The Piano Knabe Beautiful," 12"x16" bound in maroon leatherette. I will pay your price for this book. **Brady, 4609 Crankbrook, Indianapolis IN 46250. (317) 259-4305. After 5 p.m. call (317) 849-1469**

WANTED — Tunemaster or Sight-O-Tuner. Please write offer, giving price and whether instrument needs repair. **D.L. Dyer, 8 Locust Lane, Bronxville NY 10708. (914) 337-3335 (nights)**

WANTED: A "Burbach" piano, any condition, also information concerning this brand. **"Guess Who," 902 South St. Francis, Wichita KS 67211**

WANTED — A plate for an early Model A, 6' 2½" Steinway grand. Call collect or write: **Tom Kuntz, Rt. 1, Box 201, C.D.A. Idaho 83814, Phone (208) 667-1205**

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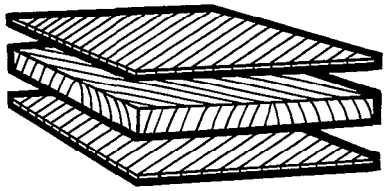
It has come to our attention that the official PTG logo and emblem *are being used by people who are* not craftsmen members of PTG.

It is extremely important to know *that this emblem is officially re*gistered and is the protected trademark of the Piano Technicians Guild, Inc.

It cannot be used by any individual or firm unless they are fully qualified and accredited by this guild through proper competence testing procedures. Any illegal use of this emblem should be reported to the home office immediately for proper action.

Pencil point proves performance of new Wurlitzer Soundboard



The grain of the wood in both top and bottom layers of the new soundboard runs parallel to the general direction of the treble bridge. The fine grain of the inside layer runs in the direction of the ribs.

Picture below shows relationship of crowned rib to soundboard. Putting a crown into the underside of the ribs holds a crown in the soundboard. This soundboard is of uniform thickness throughout.

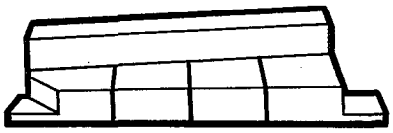
Wurlitzer's new all-spruce Duraphonic Multi-radial™ Soundboard transmits string vibrations more efficiently than any other.
To prove its responsiveness, touch the point of a sharp pencil to any area of the board and strike a note as you hold the pencil gently against the surface. Test it top, bottom, sides and center. You will feel vibrations that are both strong and evenly distributed.

That is because Wurlitzer now uses three separate layers of mountain-grown spruce in all of its finer pianos. These layers are placed at scientific angles so they transmit string vibrations (which travel mostly with the grain) to all corners of the board. The result is more volume, richer tone, and greater dynamic range. Crowning of the soundboard is achieved by crowning both ribs and soundboard liners. The soundboard itself is of equal thickness throughout and is therefore more capable of equal response in all areas.

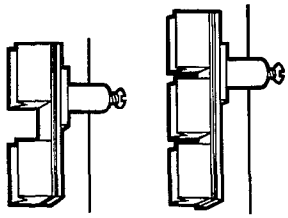
Of still greater interest to technicians, this new soundboard is more stable, with a coefficient of expansion/contraction that is 80% lower than that of solid spruce. This means truer tuning and fewer problems caused by moisture or temperature variations.

If you would like assistance from Wurlitzer technical staff, call 800/435-2930 toll-free between 8:00 AM and 4:30 PM. For parts, call Code-A-Phone 800/435-6954. In Illinois call 815/756-2771.

Further enhancing tone production is a new Quadrasonic™ bass bridge built in four sections. Low notes do not oscillate the whole bridge, but transmit more directly into the soundboard.



Dynamic response of the new soundboard is so much greater, Wurlitzer has increased the damper size by 30% to control the greater tonal output.



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1980 HALL OF FAME AWARD

You are invited to submit names and qualifications of nominees for the 1980 Hall of Fame award.

For eligibility to the Hall of Fame, the member must have demonstrated:

(1) A definite contribution to the upgrading of the piano industry.

(2) Outstanding personal and professional integrity to the point of being an inspiration to others.

(3) Long-term dedication to the causes, ideals and purposes of the Guild.

(4) Outstanding contribution and implementation of ideas, programs, etc., resulting in a definite improvement of the piano industry.

All names and qualifications submitted will be considered by the Hall of Fame Award Committee and their selection will be completed by March 1980.

If material about or photos of a nominee can be made available for the Hall of Fame book, please enter the information with your nomination.

Send nomination and other information to George Morgan no later than December 1st.

George Morgan, Chairman
Hall of Fame Committee
Piano Technicians Guild
2992 SW Avalon Way
Seattle WA 98126

(206) 932-8080

1983...?

It is time to begin thinking of the 1983 Annual Convention.

If your chapter is located in the South Central Region, Vice President Sid Stone will be contacting you about hosting the 1983 convention.

Begin putting together your ideas for a successful site which could accommodate our convention and institute.

-fold here-

-fold here-

Piano Technicians Guild

SEPTEMBER UPDATE

COUNCIL MINUTES

Your UPDATE has a special feature this month -- complete minutes of the 22nd Annual Council Session held in July in Minneapolis.

To remove from the magazine, gently pry the booklet away from the staples.

Cut with scissors on the indicated line, then fold along the middle.

You now have a handy reference to the council actions.

NEW TAPE AVAILABLE

James Niblock -- "Sonatina for Five and Seven Tempered Piano" (1973).

Owen Jorgensen, Piano. Half track monaural at 7½ ips.

GUILD DIRECTORY

The Home Office is planning for the 1979/80 Directory. Chapter presidents were mailed the most recent computer print-out showing the full information on every member in their chapters.

Chapter presidents were asked to return the information as of September 12th, but fewer than 50% have been received.

PLEASE CHECK WITH YOUR PRESIDENT and make sure that correct information in entered on the print-out.

We will continue to accept corrections as long as possible.

MEMBERS-AT-LARGE are encouraged to call or write the Home Office if there has been any changes in your membership records.

MINUTES OF THE 22nd ANNUAL COUNCIL SESSION OF THE PIANO TECHNICIANS GUILD, INC.

Minneapolis, Minnesota, July 22 and 23, 1979

CALL TO ORDER: The annual session of the Council of the Piano Technicians Guild was called to orde: by President Don Morton on Sunday, July 22, 1979 at 10:04 a.m. in the Radisson Downtown Hotel, Minneapolis, Minnesota.

INVOCATION: President Morton led the Council in silent meditation.

TRIBUTE The President paid tribute to the memory of Leslie Hoskins.

ROLL CALL: The roll of chapters, delegates and alternates was called. The official report showed 2,550 franchised members in the Guild and 1,850 members represented by delegates. A quorum was declared present. The roll showing chapters represented in each region is attached to these minutes. The total of franchised members represented throughout the Council session was 1,957.

NEW CHAPTERS: The Council granted charters to the following new chapters:

Pamlico, North Carolina; Blue Ridge, Virginia; Vancouver Island, B. C., Canada.

CHAPTER NAME CHANGE: By general consent the Council approved name changes for the following new chapters:

Delaware to Wilmington, Delaware; Idaho to Idaho East; Susquehanna to Southern Tier, New York; Greenville to Western South Carolina.

STANDING RULES: The Council standing rules were adopted as printed.

AGENDA: J. Gold proposed the addition of an emergency provision to change the Guild fiscal year. Motion adopted with one negative vote.

Recommendations from the following committees were added to the agenda: Internal Code of Ethics; Hall of Fame; Examination and Service Standards; International Relations. Membership Certificates added under other business.

On motion of L. Crabb the agenda was adopted as amended.

CORRESPONDENCE: It was reported that there was no correspondence requiring action by the Council.

REPORTS OF OFFICERS: The president reported on the status and progress of the Guild. The written reports of officers contained in the Council agenda books were received by the Council. It was announced that the written report of SERVP Baskerville was available for distribution. NERVP D.Bittinger and CERVP G. Peters reported corrections to be noted in the typed copies of their reports.

REPORT OF THE EXECUTIVE DIRECTOR: Don Santy, Executive Director, reported on the status and progress. The written report was received as printed.

MINUTES: The minutes of the 1978 Council session were approved as printed.

REPORTS OF COMMITTEES: Reports of the committees were received as printed in the Council agenda books.

H. MacConaghy, Chairman of the Visually Handicapped Committee, requested that the names of the committee members be added to the report.

RECESS: The Council recessed at 12:00 noon.

RECONVENE: The Council reconvened at 1:39 p.m.

QUORUM: The presence of a quorum was determined.

AGENDA: M. Miccio moved to add "Wives Lives" as a subject for consideration

-fold here-

SAM PEARLMAN

After the recent convention held in Minneapolis, we were saddened to learn of the death of Sam Pearlman, newly elected Western Regional Vice President. Guild Vice President Sam Stone remembers Sam with this tribute.

"Sam started in show business at the age of 14 as an usher in New York -- then to theater manager, district manager, and to division manager.

"He installed more than 50 Cinerama theaters, starting with Lowell Thomas Productions in 1953. He was at Loew's Theater in New York City where he booked most of the movie stars at that time, earning him the title of 'Broadway Sam.'

"For 18 years he was the manager of Vincent Lopez. During World War II he was the the Auxiliary Police Commissioner of New York City. Until his death, he was steward for the Association of Theatrical Press Agents and Managers.

"During the last several years, Sam's great love was piano service and the Piano Technicians Guild. He was elected Western Regional Vice President in Minneapolis because of his background in public relations, his dedication to the Guild, and for his wit and humor.

"He was already making plans for the 1981 national convention in San Francisco to be the biggest and best Guild convention ever. As Regional Vice President he was looking into the possibility of a chapter in Mexico.

"The Executive Board will miss him, his chapter and region will miss, and the Guild has lost a devoted and resourceful member."

1980 DUES BILLINGS

Chapter dues will be collected by the Home Office, within the following guidelines:

The chapter dues year must be the same as the Guild dues year (January through December).

It is up to the individual chapters to notify the Home Office by NOVEMBER 15TH if they wish to have their dues included in the Home Office billings for 1980.

The dues billings will be mailed in early December.

Changes in chapter dues (amount) must be effective January 1st and cannot be made during a calendar year.

If the Home Office has collected your chapter's dues for 1979, we will automatically continue to include your dues in the billing unless notified otherwise.

Beginning in 1980, all members will be required to pay their chapter dues IN FULL with the first dues payment, whether the Guild dues are paid in full or in partial pay payments.

Reimbursements to chapters will be made at the end of the first quarter.

If you have any questions, please call or write to the Home Office, Lynn Pelkey, 113 Dexter Avenue N., Seattle WA 98109.

IMPORTANT

Delegates and alternates to the 1979 Convention in Minneapolis were given sample examination questions to share with their chapter members.

If you have any suggestions, corrections or additions, to the newly proposed exam, please send to:

Sid Stone
1075 Palisade St.
Hayward CA 94542

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on content of the Guild Journal. On a counted vote the motion was defeated with 37 votes in favor and 39 opposed.

BUDGET: The assembly reviewed and debated the proposed budget which was adopted as printed.

AMENDMENTS TO THE BYLAWS AND REGULATIONS: Amendments were considered as follows:

1. BYLAWS ARTICLE VI SECTION 3 (b) 6 (a), (6) & (c) COLLECTION OF DUES (p18)

Article VI Section 3 (b), substitute: "Dues for Craftsmen, Apprentices, and Allied Tradesmen may be paid in three equal payments due January 1, April 1, and June 1. A service charge of $3.00 additional will be included only for the second and third payment to cover billing and processing costs."

Article VI, Section 6 (a) substitute: "Dues will be considered delinquent as follows: Dues billed January 1 will be delinquent if not paid by March 31. Dues billed April 1 will be delinquent if not paid by May 31. Dues billed June 1 will be delinquent if not paid by July 31."

Article VI, Section 6 (b) substitute: "When dues become delinquent, Notice of delinquency will be sent out first class mail, to the last known address. If no response is forthcoming in the following thirty days, the name shall be dropped from the membership rolls."

Article VI, Section 6 (c) delete so that there will be no late charges. E. Preuitt moved to substitute the following: "Dues for all members shall be paid annually and due January first of each year" An amendment was proposed to make payments biannual and due January first and April first of each year. J. Burton moved to strike out "April and insert "May"

The amendment proposed by J. Burton was defeated. The amendment for biannual payments was defeated followed by defeat of the amendment proposed by E. Preuitt.

On motion of W. Alexander the original motion was adopted as printed.

2. REGULATIONS ARTICLE II, MEMBERSHIP, SECTION B (2) (p30)

Since many chapters ask that chapter dues be billed along with the national dues, the following amendment is to substitute:

"Chapters may elect to have chapter dues billed and collected by the home office. Chapter dues will be included in their entirety as part of the first payment. Such dues will be reported and sent to participating chapters in April."

On motion of M. Miccio the amendment was adopted.

3. BYLAWS ARTICLE VI SECTION 7, REINSTATEMENT (p18)

As presently stated, there is no value for a member to resign in good-standing so far as resuming membership is concerned.

Delete present section and substitute the following:

a. A member who has resigned in good standing may be reinstated with continuing membership by paying any back dues and with approval of the chapter.

b. A member who has resigned in good standing may apply as a new member and will, if accepted by the chapter, receive a new entry number. This will not constitute a continuing membership.

c. A member who has been dropped for non-payment of dues may be reinstated with approval of the chapter and upon payment of all back dues and a reinstatement fee of $30. This will constitute continuing membership.

d. A member who has been dropped for non-payment of dues more than twelve months earlier may apply as a new member, receive a new entry number and shall take an examination if required to do so by the chapter. This will not constitute continuing membership."

A proposal to amend item (d) by striking out the words "If required to do so by the chapter" was defeated.

R. A. Jordan moved to amend item (b) by inserting "and will take an examination if requested to do so by the chapter" after the words "may apply as a new member". The amendment was adopted.

After further debate the substitute was adopted as amended.

4. BYLAWS ARTICLE III SECTION 2, ASSOCIATE MEMBER (p16)

Delete the two paragraphs under Associates. Substitute: "All Associate members on PTG rolls as of September 1, 1979, will retain all rights and privileges as per Bylaws in force as of July 1978. They continue to pay dues as previously to maintain membership."

The amendment to delete Associate membership was defeated.

5. BYLAWS ARTICLE VI SECTION 1, REMISSION OF DUES (p17)

Substitute: "In cases of inability to pay, a chapter may vote to maintain a member on PTG roll by paying a token annual fee of $30 directly to the home office. This payment shall maintain the member's good standing, Guild insurance, Journal subscription, and all other benefits."

A motion to amend by striking out the words "In cases of inability to pay" and inserting "For good and sufficient reasons" proposed by J. Burton was not adopted.

A motion to amend by striking out "$30" and inserting "one-third of Craftsman dues" was adopted.

A motion to amend by adding the words "Extensions beyond one year must be approved by the Regional Vice President" was defeated.

The motion to substitute was then adopted as just amended.

6. BYLAWS ARTICLE VI SECTION 1, PTG DUES (p17)

Insert a new paragraph clarifying payment of dues for Chapter Sustaining Members:

" A token annual fee of $30 shall be paid for Chapter Sustaining Members by the sponsoring chapter. This payment shall maintain the Sustaining Member's good standing, Guild insurance, Journal subscription, and all other benefits."

A motion to amend by striking out "$30" and inserting the words "One-third of Craftsman dues" was adopted.

The amendment to insert the new paragraph was then adopted as amended.

7. BYLAWS ARTICLE VIII, JOURNAL & BULLETIN (p18)

Editorial change: If numbers 5 and 6 are adopted, strike out paragraph (e) as it will be covered under new paragraphs in Aritcle VI, Section 1, (f) and (g) above.

The proposed editorial changes were adopted as printed.

8. BYLAWS ARTICLE XI SECTION 9, TAPES OF MEETING (p22)

Delete from the duties of the Treasurer-Recording Secretary the follow-

addressed."

So ascertain that your chapter and the Home Office both have your correct, complete address.

Since the magazine is mailed on a special permit at reduced rates, it does not receive the same treatment as first class mail or commercial publications.

Depending upon the amount of mail moving through the postal system, it can take as long as three weeks for a JOURNAL to reach the East Cost.

We try to replace magazines whenever we discover an error on our part. But this is terribly expensive.

Initial production cost for each magazine is over $1. When we receive a change of address notice from the post office, it costs 25¢ more. Then if we remail the magzine, it has to be in an envelope and at regular rates.

When you add in employee time and the cost of a second magazine, it gets to be an expensive replacement cost. Also, we cannot maintain an overly large inventory of extra magazines because that raises the production costs.

Be sure to contact the Home Office if you are experiencing a delivery problem with THE JOURNAL. We want to be sure that you are getting your copy!

MEMBERSHIP CERTIFICATES

The new membership certificates have been mailed to those members who paid Guild and chapter dues within the first quarter of 1979.

Members who made partial payments or completed payment after that date will receive their certificates as soon as they are received from the engraving company.

Further mailings will be made regularly as payments are received. Certificates are engraved in batches of 200 or more.

"I didn't get my magazine last month. Why?"

"My magazine was really late. What happened?"

These are questions we sometimes hear at the Home Office.

Want to know some of the reasons why your JOURNAL may have been late or not delivered at all?

First, we are doing our part by backing up the mailing dates for the magazine. You will notice this more so in upcoming months.

Also, the Home Office keeps careful checks on the computerized mailing list. Daily entries are made to ensure an accurate, up-to-date list when the mailing labels are "pulled" for THE JOURNAL.

Since the Guild is a nonprofit organization, we are allowed to use a special "controlled circulation, second-class" permit. The actual cost of mailing the magazine is negligible, but there are stipulations.

THE JOURNAL is not automatically forwarded by the post office to a member who has moved. Instead, the magazine is destroyed by the postal service and a change of address notice sent to the Home Office.

Each of these notices costs us 25¢ and we receive a sizeable quantity every month.

You can guarantee forwarding postage with your post office, but you have to specifically request it and it can be a costly service.

A single digit error in your zip code or a missing apartment or box number can cause the postal service to destroy the magazine and send us a notice of "undeliverable as

ing words: " . . make tape recordings of each council and board meeting, and at each meeting have immediately available tapes of the two preceding board sessions and the last preceding council session; forward all other tapes to the home office for permanent storage for five (5) years."

The motion to delete the above words was adopted.

9. BYLAWS ARTICLE XIII SECTION 1 (p23) & REGULATIONS ARTICLE I SECTION B(21) p29

The following is a direct quotation from page four of letter of July 13, 1978, from MacKenzie Carter, III, of Webster and Chamberlain, Washington, D. C., giving legal opinion on the PTG Tuning School endorsement.

"*In order to insure that the PTG endorsement program is in accord with* federal antitrust statutes and Federal Trade Commission regulations, the following guidelines should be respected:

"1. PTG must utilize written, objective, and reasonable standards in evaluating the schools which request such evaluation.

"2. Copies of all such standards should be made available to schools upon request.

"3. The rating provided by PTG officials for a school must be supported by written reasons based upon the official PTG standards of evaluation. The rating and the reasons therefore should be shown to the school upon request.

"4. The school evaluation and endorsement program must be open to all schools which apply, whether or not members of PTG or otherwise connected with PTG.

"5. All applicants, regardless of which school they have attended (either an endorsed school or an unendorsed school) or course of instruction they have followed, must be permitted to undergo the tests administered by PTG. Moreover, an applicant may not be required to join PTG as a condition of undergoing such tests to obtain 'craftsman' certification.

"6. All fees charged by PTG for the school evaluation and rating program must be reasonable and directly related to the actual cost of providing the evaluation and rating.

"7. PTG should periodically re-evaluate schools which it has endorsed to insure that the endorsement standards have continued to be met by the school.

"8. PTG should provide an appeal procedure designed to provide a fair and thorough review of decision made by its officers as to the rating and quality of a school. This appeal procedure should be made available to any school which is dissatisfied with the rating it has received.

"If these guidelines are followed, the PTG school endorsement program will be in compliance with FTC regulations and applicable federal law."

The board passed the following: "In view of the fact that compliance with legal requirements stated above in the guidelines would involve expenditure of resources and time which PTG does not have available; and that to do anything less than properly fulfilling the requirements would be a disservice to members and could subject PTG to legal action, the executive board reluctantly recommends that PTG no longer endorse piano tuning schools and that all references to endorsement and to the Piano School Committee be deleted from the Bylaws and Regulations."

COMMENT: The guidelines referred to above were part of a four page legal letter requested regarding the legal aspects of PTG tuning school endorsement. The Bylaws Committee's work is to delete the references as noted above.

The proposal to discontinue endorsement of piano tuning schools was adopted. J. Hopperstad voted in favor of the proposal and moved a reconsideration of the vote which was taken up the next day.

10. BYLAWS ARTICLE XVI SECTION 3, EMERGENCY RESERVE FUND (p25)

3 (a) amend by deleting two percent (2%) and substituting one percent (1%).

The amendment was adopted.

RECESS: The Council session recessed at 5:00 p.m. to reconvene at 10:00 a.m. Monday, July 23, 1979.

RECONVENE: The Council reconvened at 10:00 a.m. Monday, July 23, 1979.

QUORUM: A quorum was established.

AMENDMENTS TO THE BYLAWS AND REGULATIONS were continued as follows:

11. BYLAWS ARTICLE III MEMBERSHIP SECTION 1, CLASSES OF MEMBERSHIP (p15)

Substitute the following:

"Franchised members shall be classified

a. Registered Technician - Active
b. Craftsman - National Sustaining
c. Craftsman - Chapter Sustaining"

On motion of D. Evans the substitute was adopted.

12. BYLAWS ARTICLE III SECTION 2, QUALIFICATIONS FOR MEMBERSHIP (p15)

Substitute the following:

"Registered Technician - Active shall have met the minimum technical requirements of the Bylaws and have been accepted by majority chapter vote. They shall enjoy all rights of membership without restrictions. Registered Technicians - Active shall have the right to use the following titles:

a. "Craftsman" and/or
b. "Registered Tuner Technician" abbreviated "RTT" after surname
c. "Registered Technician" - abbreviated "RT" or "Reg. Tech." after surname

By general consent the assembly amended the proposal by adding the words "Registered Craftsman" after "and/or" in item (a).

On motion of W. Marciano the substitute was adopted as amended.

13. BYLAWS ARTICLE XV HOME OFFICE SECTION 2, DUTIES (k) (p24)

Add at the end of present paragraph k:

"In all publications to instruct the editorial board;
1. to use in lieu of the pronouns he, his, him, to use the pronoun combinations, he/she, his/hers, him/hers, wherever applicable;

2. Only to accept articles and classified advertising for publication that do not discriminate against any person because of race, color, creed, sex, or national origin."

The proposal was divided for consideration and vote.

Item (1) was defeated. Item (2) was adopted

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a. One examiner can give three examinations per piano per day.
b. One examiner can give five examinations with two pianos per day.
c. A normal examination takes three hours.
d. Preparation time six hours initially.

6. Qualifications for national examiners appointment to be:

a. Location b. Professional commitment c. No personal advertising
c. Familiar with electronic equipment e. Passed examination with 90%
f. Apointed by the executive board g. Other requirements as the executive board may decide.

The executive board recommended that the Council delegates adopt the following:
"1. The Examinations Committee's work be endorsed and accepted.
2. Authorization be given to continue work in testing, developing and refining procedures and techniques.
3. Authorization be given to the committee to present results of its work in a form to incorporate them into the Guild bylaws at the next Council session to make the newly developed testing procedure the only way to test for membership and reclassification."

The council endorsed and adopted the report and the recommendation.

CURRENT TUNING TEST PROCEDURES: In response to a question it was announced that chapters may use the new testing procedures but if this was done the aural portion of the new procedures was not to be a requirement of the test. Chapters may also continue to use the testing procedures still established until such time as the new tuning test is made mandatory.

COPYRIGHT: It was announced that the Guild would explore the feasibility of obtaining a copyright on the new tuning testing procedures.

PROPOSED NEW WRITTEN EXAMINATION: Copies of a possible new written examination questions were distributed to the delegates and alternates with a request that they take the papers to their chapters and forward comments and contributions to the newly elected Vice President Sid Stone.

INTERNATIONAL RELATIONS: A report to the International Relations Committee was given and it was announced that a delagation of members of the Japanese Association of Piano Technicians and a member of the association of piano builders from Germany would be present at the opening ceremony of the convention that evening.

A proposal for the organization of an international association of piano technicians and builders was discussed and the recommendation of the executive board was adopted as follows:

"On behalf of the Piano Technicians Guild membership the executive board be authorized to participate as a prospective member association in the organizational meeting to form an International Association of Piano Technicians and Builders."

THANKS: The president thanked the members and all who had contributed toward completion of a successful session. A standing ovation was given to the president on his retirement from the immediately preceding two-year term of office and in recognition of his earlier service as Guild president.

ADJOURNMENT: The Council session was adjourned sine die at 5:00 p.m.

MEMBERSHIP CERTIFICATES: C. Burbach presented the subject of the new Membership Certificates for discussion and with N. Hunt proposed that they be discontinued. The proposal was defeated.

RECESS: The Council recessed at 12:00 noon to reconvene immediately following completion of the regional caucus sessions.

RECONVENE: The Council reconvened at 1:20 p.m.

RATIFICATION OF ELECTIONS OF REGIONAL VICE PRESIDENTS: Caucus elections of the Regional Vice Presidents were ratified by the Council:

Western Region . .	Sam Pearlman	Central West Region . .	Ernest Preuitt
Southeast Region .	Walter Kerber	South Central Region .	Tom Blanton
Central East Region .	George Peters	Northeast Region	Dick Bittinger

ELECTION OF THE NOMINATING COMMITTEE: The following candidates were nominated:

John Clopton, Douglas Denham, Scott Welton, Allyn Winslow, Jimmy Gold, Charles Burbach, Maurice Roseborough, George Morgan, Harold Miller, Joe Saah, Bob Perkins.

The election results were announced as follows:

Elected to the Nominating Committee: Charles Burbach, Jimmy Gold, Scott Welton, George Morgan, Joe Saah.

Alternates in the following order: Harold Miller and Bob Perkins.

ELECTION OF MINORITIES COMMITTEE: The following candidates were nominated and no other nominations being proposed were then elected:

Kay Nickerson, Mike Miccio, Walter Brooks.

ELECTION OF THE EDITORIAL ADVISORY COMMITTEE: The following candidates were nominated and no other nominations being proposed were then elected:

Henry Baskerville -

GUILD INSURANCE PROGRAM: Eloise Ross, insurance broker, reported on insurance programs available to Guild members and other aspects of the total program offered to the membership.

INTERNAL CODE OF ETHICS: The subject of the Internal Code of Ethics motions postponed earlier in the day to this period on the agenda was introduced again. R. A. Jordan first proposed a new motion which was adopted after discussion as follows:

"That the Council ratify the emergency action of the executive board in deleting the paragraph in the Guild Regulations which prohibits a member from knowingly soliciting work or employment customarily performed by a brother member."

Government regulations requiring the deletion were read to the assembly by the Treasurer-Secretary, C. Huether.

The two motions proposed earlier in the day by R. A. Jordan were then adopted individually.

EXAMINATIONS AND SERVICE STANDARDS COMMITTEE REPORT: The following report was presented to the Council by the Examinations and Service Standards Committee on the subject of the new Tuning test:

1. Bench test to be taken at chapter level. (Improved test under development)
2. Written test as now being developed.
3. Tuning test administered as newly developed procedures by certified examiners at an approved site.
4. A tuning examination fee for each applicant to be determined.
5. Certified examiners and approved sites to be selected and supervised by the executive board and based on the following standards:

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14. BYLAWS ARTICLE XIII COMMITTEES SECTION 3, COMMITTEE APPOINTMENTS (c) (p23)

Change last word in last sentence of paragraph from "Chairman" to "Chairperson."

REGULATIONS ARTICLE III ORGANIZATION, SECTION A AWARDS (p31)

Last paragraph:

Amend by striking out the work "chairman" and inserting "chairperson."

Kl Nickerson moved to amend both proposals by striking out "chairperson" and inserting "chairman and/or chairwoman". The amendments were defeated.

After further debate the proposal was defeated and the word chairman retained in the Bylaws and Regulations.

15. REGULATIONS ARTICLE III, ORGANIZATION, SECTION A AWARDS (p31)

Amend (a) by striking out:

" A PTG Man of Note " and inserting " A PTG Technician of Note."

The proposal was adopted after amendment by N. Heischober to "A PTG Member of Note".

16. BYLAWS ARTICLE XIII SECTION 1, STANDING COMMITTEES (p23) AND REGULATIONS ARTICLE I, SEE B (4) (p27)

Change the name of the "Chapter Awards Committee" to "Chapter Achievement Committee."

The motion was adopted.

17. REGULATIONS ARTICLE I SECTION B 3, CONFERENCE AND SEMINAR COORDINATING COMMITTEE (p27)

Substitute the following:

"There shall be a coordinating committee for conferences and seminars. This committee shall consist of three members, the vice president, and two regional vice presidents appointed by the president. Coordination of all conferences and seminars will be handled with the end in view of eliminating conflicts centralizing information and providing assistance and expertise in developing curricular and staff."

The motion was adopted.

18. REGULATIONS ARTICLE III, SECTION A, MAN OF NOTE AND GOLDEN HAMMER (p31)

Substitute:

"Man of Note and Golden Hammer award winners shall be chosen in March by a committee of five appointed by the president from the list of previous award winners. No one shall serve more than two consecutive terms on this committee. The president shall designate one member of the group to act as chairman."

The motion was adopted.

19. REGULATIONS ARTICLE I SECTION A 4, ROTATING COMMITTEES (p27)

Amend by deletion.

The amendment was adopted and rotating committees deleted.

20. REGULATIONS ARTICLE I SECTION A, ELECTED COMMITTEES (27)

Replacing existing (4):

"No employee of PTG shall serve on any elected committee."

The motion was adopted.

21. BYLAWS ARTICLE XI SECTION 3, NOMINATING COMMITTEE (p21)

Amend by adding new paragraph (d):

"d. Reduction by one member in the number on the nominating committee shall not require that the position be filled provided that the number on the committee does not fall below four."

The Reading-Lancaster Chapter proposed the following amendment which was adopted:

"Those nominees receiving the sixth and seventh highest number of votes shall be designated as first and second alternate committee members and shall be required to fill any vacancy occurring in midterm. The number of members actively serving on the nominating committee shall be five at all times."

The motion was adopted as amended.

22. BYLAWS ARTICLE XIII SECTION 1, SERVICEABILITY IMPROVEMENT COMMITTEE (p23)

Delete Serviceability Committee.

REGULATIONS ARTICLE I SECTION b (24), SERVICEABILITY IMPROVEMENT COMMITTEE (p23)

Delete Serviceability Committee.

The motions were adopted and the Serviceability Committee deleted from the standing committees.

23. REGULATIONS ARTICLE III SECTION C, COMMUNICATIONS (p31)

Delete Communications

The section on communications was deleted from the Regulations

24. REGULATIONS ARTICLE III SECTION D, CONVENTIONS (p31)

Delete all of this section.

Convention procedures listed in the Regulations were deleted after it was reported that the procedures are now included in the Convention Manual.

25. REGULATIONS ARTICLE III SECTION E (3) (p31)

Substitute the following:

"3. "A copy of the council minutes shall be distributed to every member."

The motion was adopted.

CHANGE FISCAL YEAR: Under emergency amendment procedure provided in the Bylaws the Council considered the agenda item added earlier, to change the Guild fiscal year from November 1 through October 31 to coincide with the membership dues year of January 1 through December 31. To be effective this year.

It was announced that the board had voted unanimously in favor of the proposal being an emergency amendment. By a two-thirds vote the Council approved consideration and the motion was adopted by a vote greater than the required three-quarters.

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RECOGNITION OF THE EXECUTIVE BOARD : The Council gave an ovation to the executive board and thanked Southeast Regional Vice President Henry Baskerville who was retiring from office.

NOMINATION OF OFFICERS: On motion of E. Preuitt the nominations of officers were taken up.

The report of the Nominating Committee was read as follows:
For President . . . . . Bob Russell
For Vice President . . . . . Sidney O. Stone
For Treasurer-Secretary . . . . . Charles Huether

Nominations from the floor were called for. No further nominations were offered. The candidates were presented to the Council.

D. Denham moved to close nominations. Motion adopted.

L. Crabb moved adoption of the Nominating Committee's report and election of the candidates. The motion was adopted unanimously followed by a standing ovation for the newly elected officers.

CAUCUS ELECTIONS: The meeting rooms for each caucus were announced and official caucus election packets provided for each region.

TUNING SCHOOL COMMITTEE: S. Oliver moved adoption of the following resolution which was adopted as presented:

"Be it resolved that the PTG withdraw from all tuning school endorsement or accreditation and that the tuning school accreditation committee be abolished and that all references to this function be eliminated from PTG rules and regulations. Be it further resolved that the executive board optionally may maintain a listing of tuning schools which can be made available to prospective students while making it clear that the PTG neither inspects, endorses or accredits such institutions."

RECONSIDERATION OF VOTE ON ELIMINATION OF TUNING SCHOOL ENDORSEMENT:
J. Hopperstad moved reconsideration of the vote taken on the motion to eliminate Guild endorsement of tuning schools. On a counted vote the motion to reconsider was defeated with 34 votes in favor and 47 votes opposed.

INTERNAL CODE OF ETHICS: R. A. Jordan proposed the following two motions:

1. "That the Board develop a means whereby the Government Affairs Committee and the Internal Code of Ethics Committee can work closely together with the Vice President and one RVP to bring recommendations to the Council that will promote compliance with FTC and protect the interest of all members."

2. "That the Executive Board takes the responsibility of immediate action wherever and whenever there appears a publication, in any form, which might mislead the industry or the public as to the nature of the Guild its activities, its membership, the use of the logo, or which misconstrues or cheapens the profession of piano technology".

N. Hunt moved that the motions be handled individually. Motion adopted. By general consent the Council then approved postponement of further consideration of both motions until after the next recess.

HALL OF FAME: The recommendation of the Hall of Fame Committee was considered as follows:

Amend Guild Regulations ARTICLE I COMMITTEES Section B Standing Committees 13 (c) by striking out the words "in time for the report to the board at its midyear meeting" and inserting in their place "by March of each year".

The recommendation was adopted as presented by the required two-thirds vote in accordance with the bylaws.