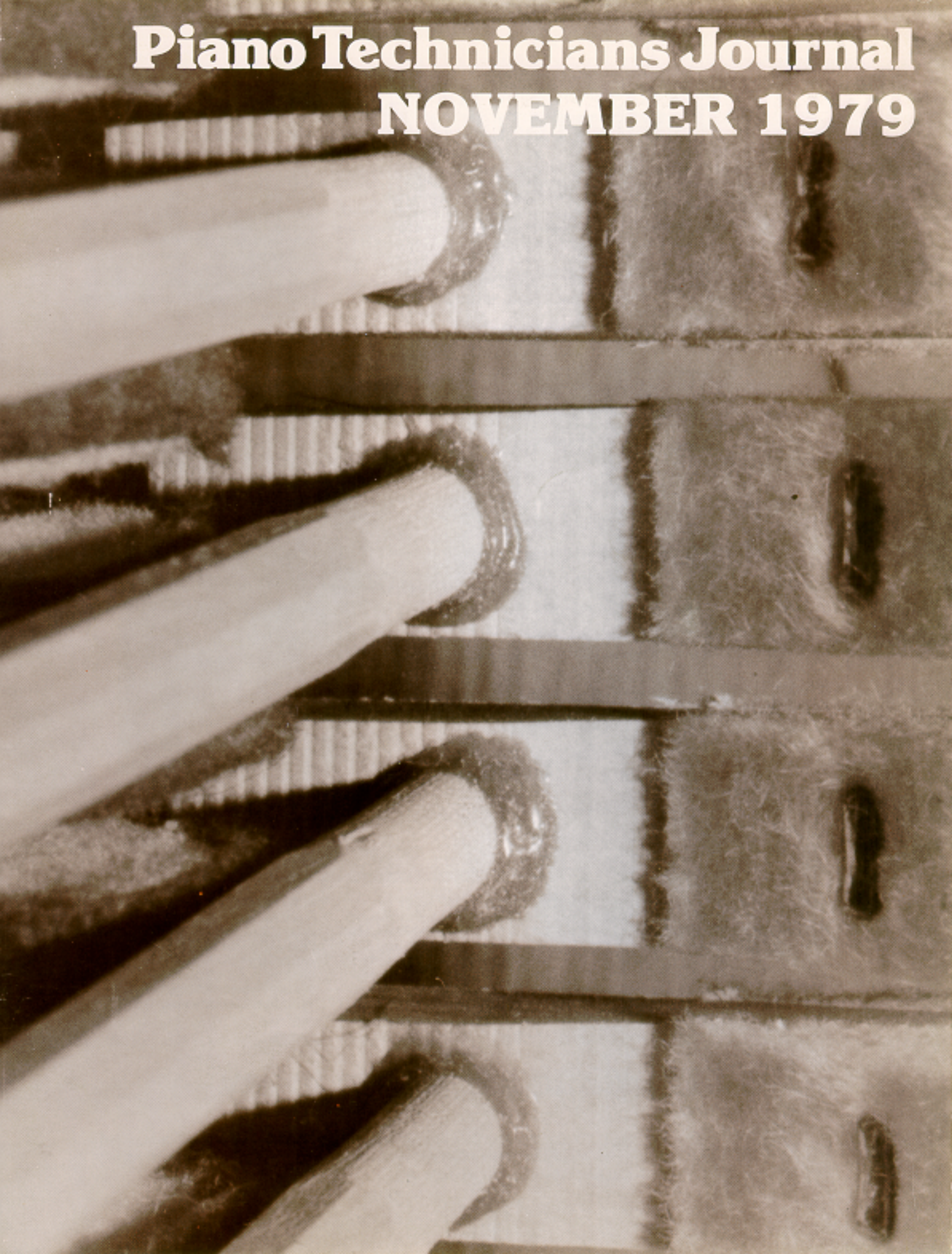
Piano Technicians Journal

NOVEMBER 1979



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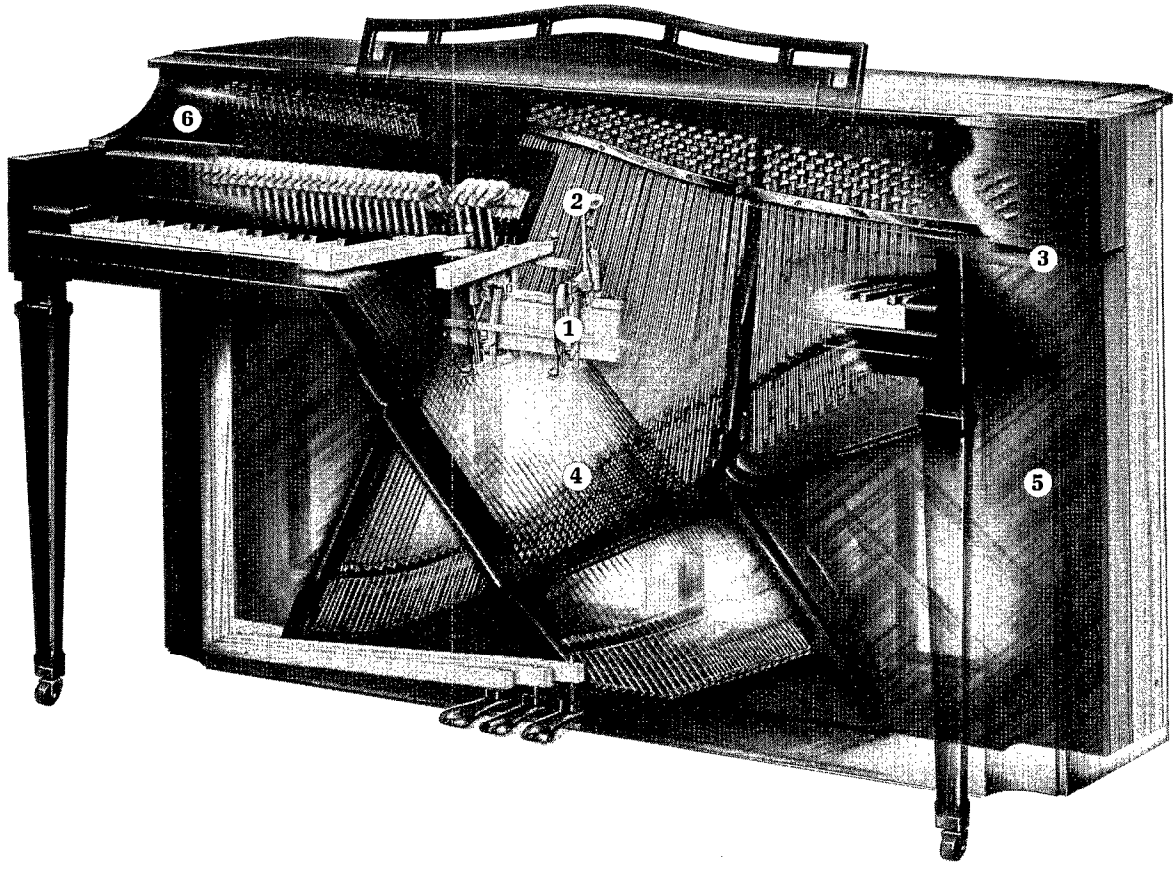

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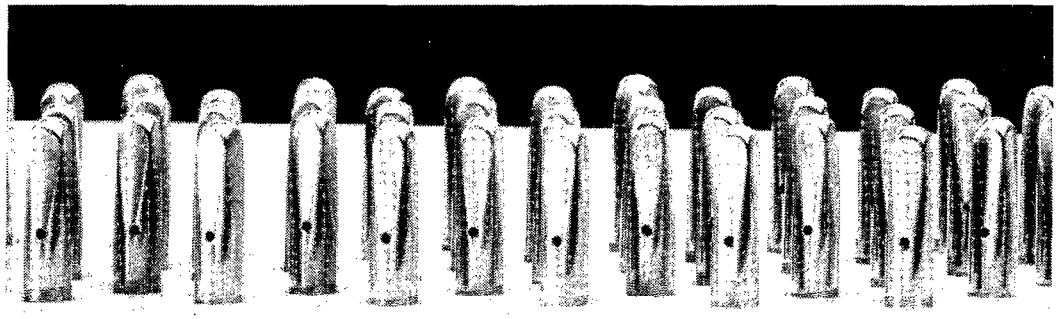

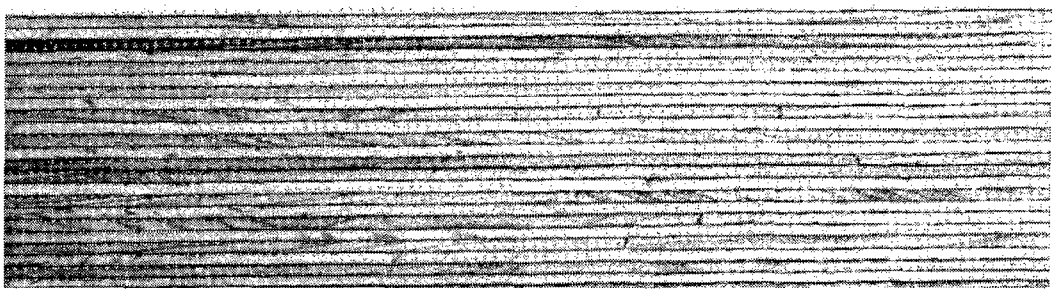

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Piano Technicians Journal

Contents

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EDITORIAL

Immediate Past President Don Morton and I have many interests in common, and one of them is the writings of Chris Robinson of the Connecticut Chapter.

We read his contributions to their "Keyboard" newsletter eagerly, and an all-time great, in our opinion, appeared in the September issue. It fits the profession, it fits the man, and it fits this month of Thanksgiving. I feel sure you will savor it as much as we. Here it is —

I've been thinking lately about how fortunate a human being I am.

Providence has granted me a stable and close marriage to a bright, lovely and independent woman; two strapping happy children; good health; and a splendid trade that keeps my interest and frees my family from economic worry. These, my blessings, are gratefully counted and received with a certain humility, for one need not look very far to know the agonies of those who cannot claim similar fortunes.

While it would be folly to discount the role of pure luck (life is a precious but precarious matter), it is not unjust to note that when persons are accepted for what they are, rather than for what one might wish them to be, they will tend to reciprocate the favor, which in turn often creates harmonious partnerships.

Similarly, children are a great deal like musical instruments: the more commitment and attention one puts into them, the better they will perform.

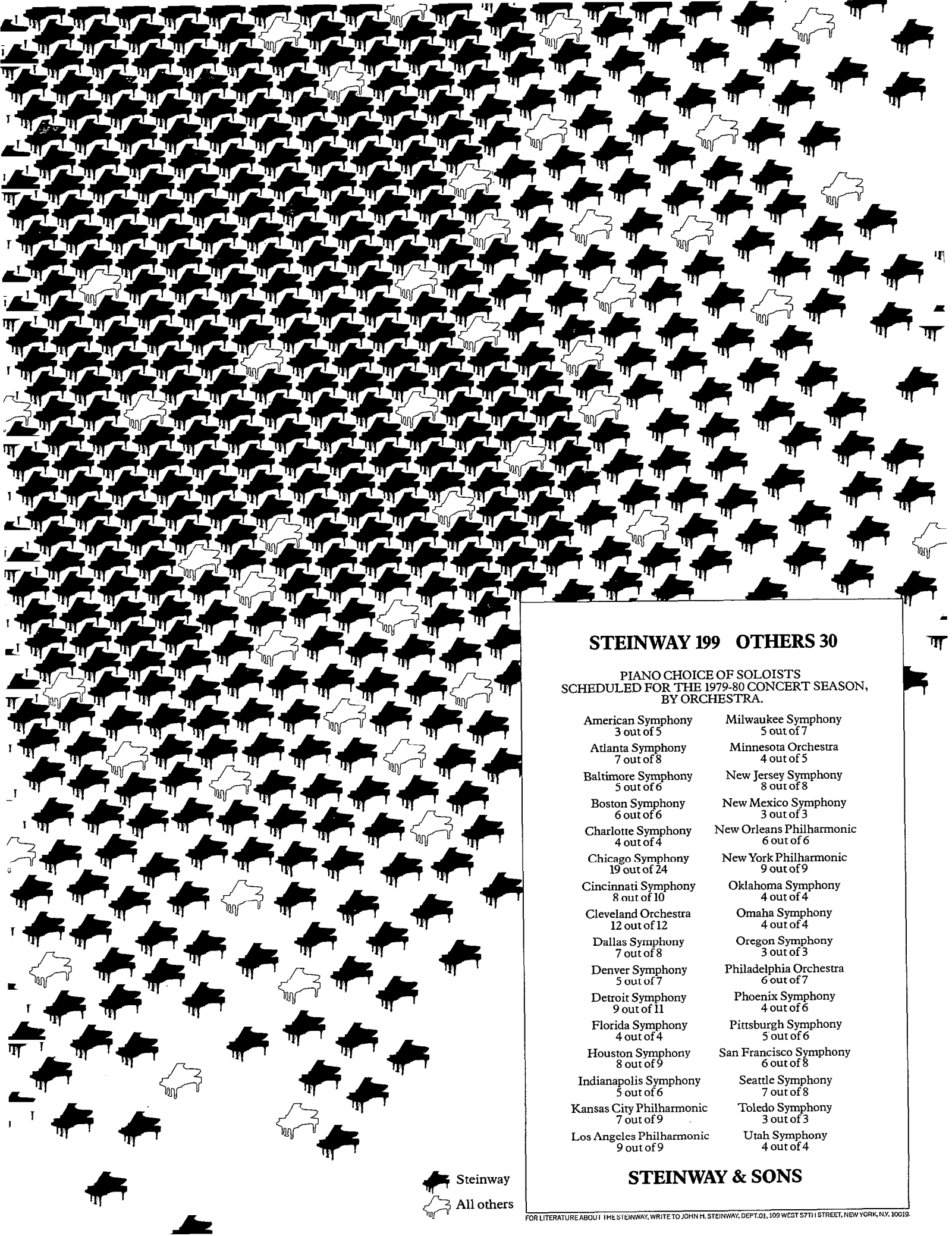
Ah, but one can claim little credit for good health, for he often neglects the organic machine.

But let's consider the occupation that consumes over half of one's waking hours. Do you know why I love this trade? Aside, of course, from my obtuse obsession with an arcane musical instrument, I need the self-reliance of beginning and ending a job with the efforts of my hands, brains and talent (Yes, darn it, talent!).

Work that has been well-accomplished I may credit myself for and accept wholeheartedly the praise of others who appreciate it. When I am lax, there is no door upon which to lay the blame but my own. I have a feeling of life competence, of being the captain of my ship, guiding my course on the sea of life. I do not, as many friends and acquaintances in other walks of life, see my existence and my society as being one of gradual deterioration — the "things can only get worse" syndrome.

Quite opposite, I see the piano service trade as constantly improving in vigor, skill, outlook and commitment. Every one of our colleagues in the Piano Technicians Guild has reason to be proud of being a member of one of the finest trades in the world. From the intellectuals who are developing a cognate language for the transmittal of technical information, to the skilled artisans who are performing structural work at a new level of mastery, to the emerging new technicians who are doing piano service work better than it has been done before (and that is no exaggeration). And lest some of the "old" piano tuners take umbrage at the above observation, let me observe that without you it would never have been possible.

Fraternally,
Chris Robinson



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Bob Russell, President

PRESIDENT'S MESSAGE

The search for knowledge is a never-ending process. New products and materials are continuously being developed, plus new recommended methods to service them. New ways to solve old problems and old, and sometimes forgotten, ideas are brought back to useful service in your "bag of tricks". With the very obvious and rather new sophistication of our members in their search for better stringing scales and action designs, we — with the help of easy-to-use calculators — becoming better shop and field technicians. Even the technicians who are not mathematicians benefit from this explosion of exciting knowledge that becomes easier to understand and use.

Some people learn their trade and then relax with the feeling they have done it. This is probably a most human reaction, but don't relax too long! Some time during this "relaxation" you and your reputation will begin to slide backwards.

I think it is sad that good technicians, for many reasons, stop their searching for knowledge. It is due to our desire for more creative training, new ideas and knowledge that we stay "Young At Heart". This desire helps to make our life and work happy and exciting and our reputation and integrity will grow and grow and never fade.

Of course this doesn't just happen with the snap of your finger. You must be open and receptive to knowledge. It can happen to you if you are teaching or listening; during a formal session or during a coffee break. This natural high, called creative exchange and learning, won't let you down.

The Piano Technicians Guild offers many opportunities for knowledge to help you maintain your excitement. A list of conferences, seminars, and conventions is listed in The Journal each month. An absolute must for any technician is to belong and be active in his or her local chapter. In this manner you will gain knowledge pertinent to local conditions. All you need to do is take advantage of the opportunities.

This month a special day is set aside to give thanks to our Maker, our loved ones, our country, and our way of life; we call this day Thanksgiving. This year, let us reflect on our professional life. Are we doing our best? Are we always open to new ideas and knowledge? Are we upgrading our skills? Are we continuing our search for knowledge?

Happy Thanksgiving.

Bob Russell

A man and his piano:

Garrick Ohlsson & Bösendorfer

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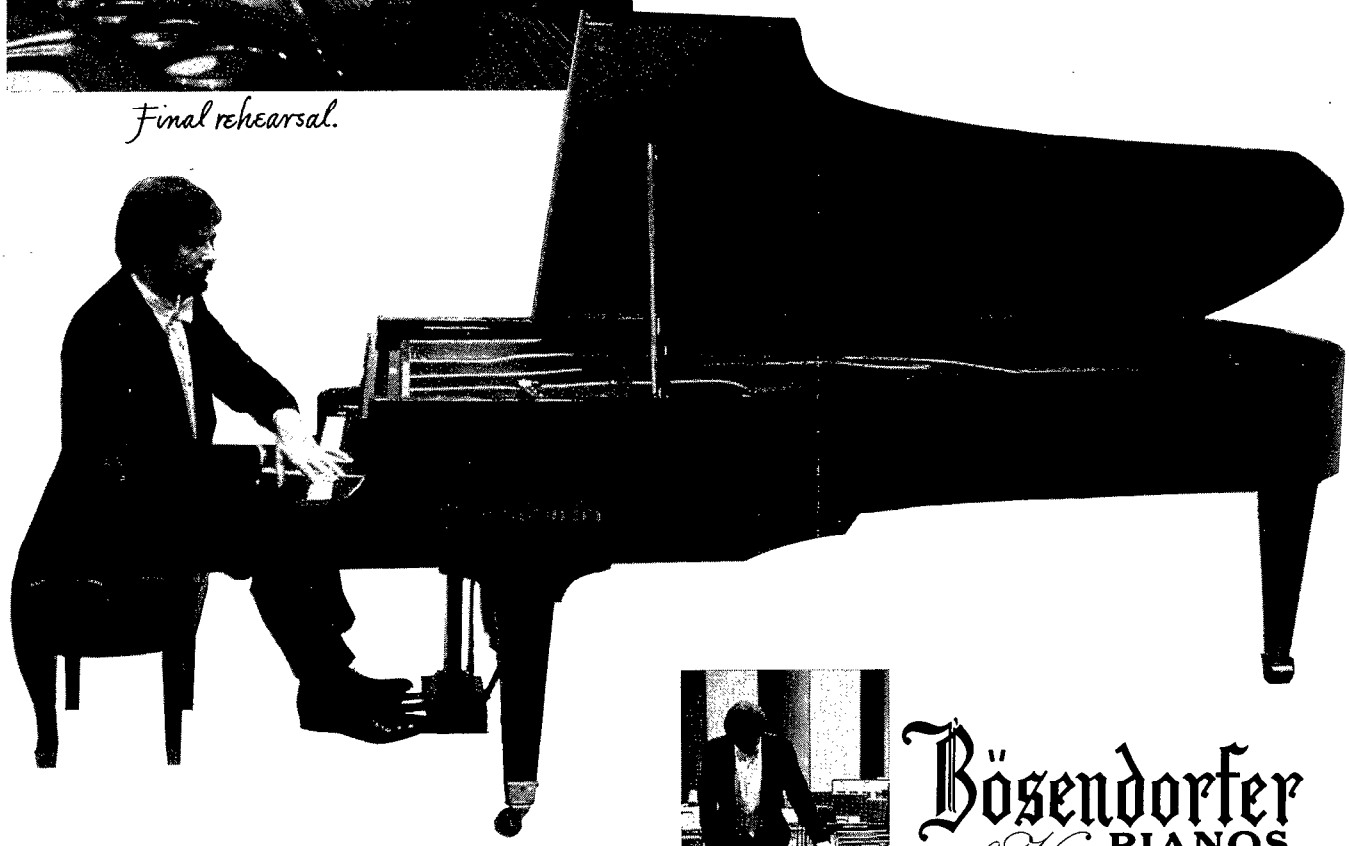

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Dave Roberts

Calculating Technician Part III

Last month we described how to calculate the quantity $(PLd/K)^2$, which was part of a longer expression for the tension **T** in a wound string, namely

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

This month, we want to describe how to calculate the expression in square brackets, namely

$$\left[1+A\left(\frac{D^2}{d^2}-1\right)\right].$$

We remarked last month that once we figure out the individual quantities $(PLd/K)^2$ and $\left[1+A\left(\frac{D^2}{d^2}-1\right)\right]$, we simply multiply these two quantities together to get the pounds tension in the string.

There are different ways to approach the calculation of the quantity in square brackets. This may depend on personal preference or on whether you have a calculator to help you or even on what kind of calculator you might have. For now, let's first figure out the quantity in parentheses; i.e., $\left(\frac{D^2}{d^2}-1\right)$, then multiply this result by the constant **A** and finally add **1**. In order to calculate the quantity in parentheses, recall from last month the rules for "squaring" and also for dividing one number by another number written under it. For example, suppose **D=8**; then D^2 is **8** times **8** which is **64**. Likewise, if **d=4**, then d^2 is **4** times **4** which is **16**. Therefore $\frac{D^2}{d^2}$ (sometimes written D^2/d^2 or $(D/d)^2$ in order to save space) is just **64** divided by **16** which is **4**. Since the parentheses surround *both* D^2/d^2 and the number **1**, this implies that we must first subtract **1** (as indicated) from D^2/d^2 *before* we can multiply by **A**. For example, if **A** is ½, then $A\left(\frac{D^2}{d^2}-1\right)$ is just ½ times **(4-1)** or ½ times **3**, which is **1.5**. Finally, we have to add this result to the number **1** (as indicated) to complete the quantity in square brackets, so **[1+1.5]=2.5**. Now we can multiply this result for the value of the quantity in square brackets by the quantity $(PLd/K)^2$, **2.5** times **144** is **360**; i.e., the string tension in this example is **360** pounds.

Now that we've done a sample calculation using simple numbers, let's do a more realistic calculation using real (rather than make-believe) numbers. In the real world, the constant **K** in our tension formula has a value **20833**. Also, the constant **A** in the real world depends on what material is used to wrap the wound string; if the wrap is copper, then **A** has the value **0.89** and if the wrap is aluminum, then **A** is **0.27**. In order to calculate the tension in pounds with the formula we've given, it is necessary that we express the quantities **P, L, d** and **D** in the proper units. In this case, we should express speaking length **L** in inches and pitch **P** in cycles-per-second (sometimes abbreviated Hertz or simply Hz); core diameter **d** and overall diameter **D** should be expressed in "mils", which is shorthand jargon for "thousandths-of-an-inch". Just for fun, let's calculate the string tension for the lowest **F (F1)** in a certain Bechstein concert grand: this copper wound monochord has **L**=75 inches, **P**=43.7 Hz., **d**=63 mils and **D**=145 mils. Therefore, the tension is

$$T = \left(\frac{43.7 \times 75 \times 63}{20{,}833}\right)^2 \left[1+0.89 \div \left(\frac{145^2}{63^2}-1\right)\right]$$

$$= \left(\frac{206{,}483}{20{,}833}\right)^2 \left[1+0.89\,(5.3-1)\right]$$

$$= (9.91)^2\,\left[1+0.89\,(4.3)\right]$$

$$= 98.2 \times 4.83$$

$$= 474 \text{ pounds}$$

This is one of the highest string tensions I've come across in a piano scale. The lowest string tension you are likely to find in a modern piano (around 100 pounds) is usually at the bottom end of the treble bridge in pianos with no wound treble unisons. You can calculate the tension in a plain string by noting that the quantity in the square brackets is just **1** for a plain string because **D=d** when there is no wrap. Therefore, if the example Bechstein string had *no* wrap on it, the tension would be just 98.2 times **1** or 98.2 pounds in order to sound at the correct pitch, **F1**.

Next month we'll discuss electronic calculators, so stay tuned to this column. . . .

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Jack Krefting, Technical Editor

THE TUNER-TECHNICIANS FORUM

BASS STRING PROBLEMS

Marvin Snell of Scottsbluff, Nebraska, asks two interesting questions on the topic of bass strings:

QUESTION: *"Using universal replacements is quite a headache for me and I usually custom order all strings. I find that the winding does not pull off as easily as the picture in the catalog depicts. I have to literally 'chew' the winding off with side cutters—tedious and time consuming. Would electricians' pliers (or something like them) work better? Winding can usually be pulled off the tuning pin end in sections about an inch long, but naturally not the loop end. I have had a set of universals for a long time but seldom use any. Even after a universal is installed, it seems to be buzzier than I can tolerate. Also, is it a good idea to squeeze or crimp the winding at the point where the discarded winding is cut from?"*

ANSWER: It has been my experience that the windings can be removed very easily on the medium-small sizes, but not so easily on the large and very small sizes. The copper wrapping seems to be too stiff and unwieldy on the large strings, and breaks too easily on the very small ones.

Regardless of size, the excess winding will have to come off, so it makes good sense to me to cut the wire to length first—there is no point in wasting time removing wrappings beyond the point where the core wire will be cut off. Place the string into position on the hitchpin and cut it off, core and winding together, at the usual spot about four fingers beyond the tuning pin. With the string still in position, mark the spot where the winding will be removed on both ends, according to the catalog instructions. Remove the string from the piano to cut the windings at both ends.

A pair of pliers with a side cutter in the throat seems to work better than a plain side cutter, because the cut-away part of the plier jaw keeps the string from slipping too far out of the throat. Grip the winding right next to the cut with a second pair of pliers, and always turn the cutter in the direction of the windings to avoid loosening them. Don't apply too much pressure, as the core wire could be scored and weakened by the cutter.

Remove the excess windings from the loop end by grasping the loosened end of the copper and unwinding it with a cranking motion. Then loosen enough of the winding on the tuning pin end so the copper can be tightly grasped with the fingers. Put the loop over the hitchpin to anchor that end of the string and pull firmly on the copper. With most string sizes, the pulling on the copper will cause the core wire to spin like a propeller, and the copper windings will come smoothly off the end of the core like line from a spinning reel. Keep shortening your grip on the copper as you steadily pull it off, otherwise it will have a tendency to break. This is a very simple, fast and reliable way to remove windings from the tuning pin end. Unfortunately, heavy windings on the larger sizes will have to be cranked off as described earlier.

Universal strings should not buzz. If they do, it would seem to indicate faulty installation. Crimping of the ends is all right, but not advisable on the very small strings because the points of the meaxgonal core tend to cut into the winding. If the excess windings were cleanly and completely severed from the windings to be used before being pulled off, there should be no problem with buzzing sounds. Noise and harshness can be caused by the misson, though; all strings of the unison must be identical, otherwise they will vibrate out of phase with each other and cause snarling sounds. As we have said before, if one string is broken, replace all strings in the unison. For further information on this topic, refer to page 10 of our November 1978 issue.

QUESTION: *"I have had considerable trouble in tuning where the wire crosses over the last turn of coil (closest to plate). One particular make of verticals seems to be famous for this and it isn't uncommon for me to find 15 or 20 pins coiled in this manner. It is my feeling that the wire is weakened at the point because it does not follow the gradual smooth contour of the tuning pin, but suddenly comes up over the last turn of coil in an inverted V fashion. I have found that, when tuning, if a sudden bind is felt just as I near the desired pitch, the string will most assuredly break if forced beyond that point and it always seems to break at the previously described location. If one tries to loosen and reset the coil it will invariably and stubbornly follow the same pattern. It seems that this situation is created in the first place by the steepness of angle of the wire after it crosses over the V-bar. If the pins were removed, shimmed and driven back in, only not as far thereby eliminating some of the steep angle, would this work or is the weakness in the wire still there causing it to break anyway?"*

ANSWER: There is a tendency for the wire to break at the point, not so much because of the bend but because the hard wire is pressing against itself, an equallya hard material. The plate, tuning pins, string rests, bridge pins and hitchpins are all softer than piano wire, so even a sharp bend against these surfaces will not have the same devastating effect as when wire bears against itself.

Figure 1 shows that this problem occurs primarily in the bass section of some verticals because the bottom of the coil is in a different plane than that of the wire as it proceeds toward the V-bar. This represents a design or manufacturing problem which could best be solved by a minor redesign of the instrument. A greater slantback angle would help (**see Figure 2**), but in my opinion the best design modi-

fication would be a split-level pinblock (**see Figure 3**), which would bring the coils into alignment with the V-bar without any other alterations.

If the pins are removed, shimmed and replaced only partway into the block as suggested in the last part of the question, the results are likely to be a mixed bag. The angle would certainly be reduced, so the wire would be less likely to break. At the same time, though, the pins would be more springy and we might not have enough of the pin in the block for good holding power, shim or no shim. If short tuning pins are in the piano now, the technician might get away with pulling the short 2/0 pin and replacing it with a long 3/0. Assuming the existing pins are 2/0 x 2⅜", a 3/0 x 2½" replacement would move the coil ⅛" further from the plate with the same length of pin in the block. The resultant springy tuning feel, while certainly far from ideal, would doubtless still be preferable to breaking strings. The question is, would we want to do this procedure on 15 to 20 pins of every piano of that particular make and model we tune?

There is really no practical field solution to this problem that I can see. If all or most pianos of a given make and model exhibit the same symptoms, I would suggest the use of the PTG Serviceability Improvement Form. One copy of this form was included with the October 1978 directory issue of the Journal, and extra copies of the forms are available from the Home Office.

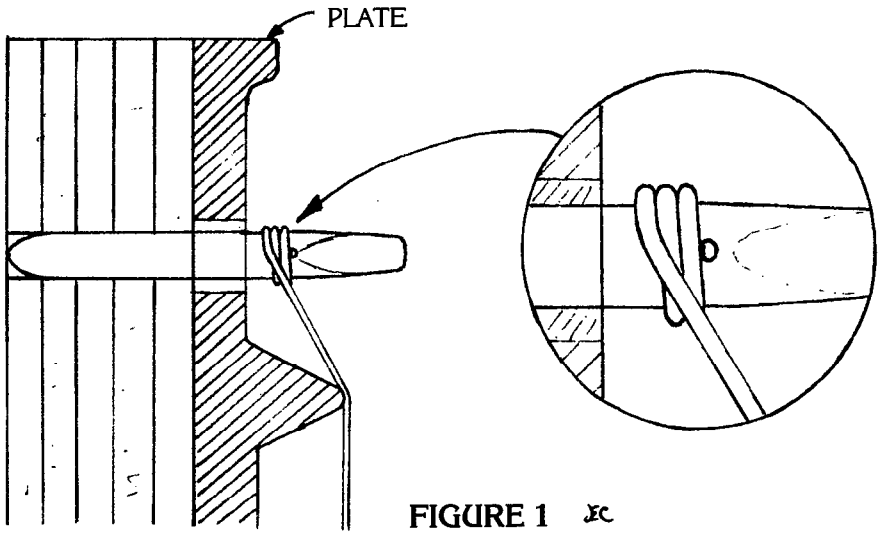


FIGURE 1 JEC

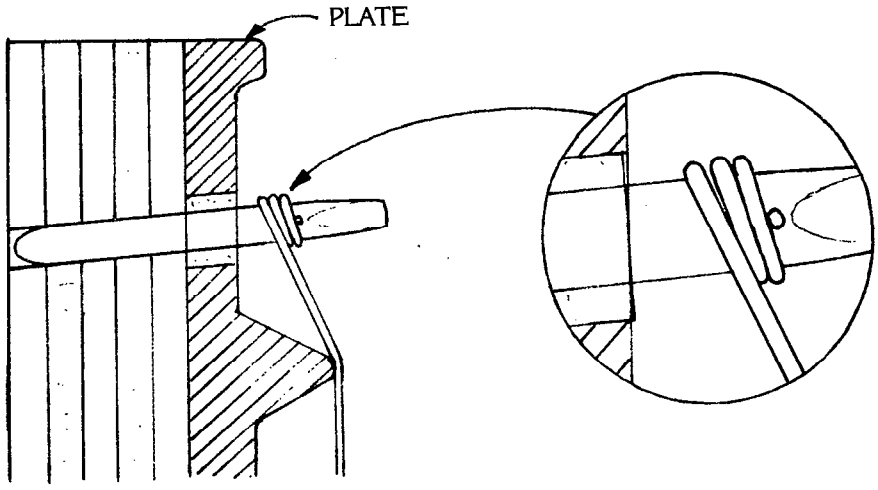


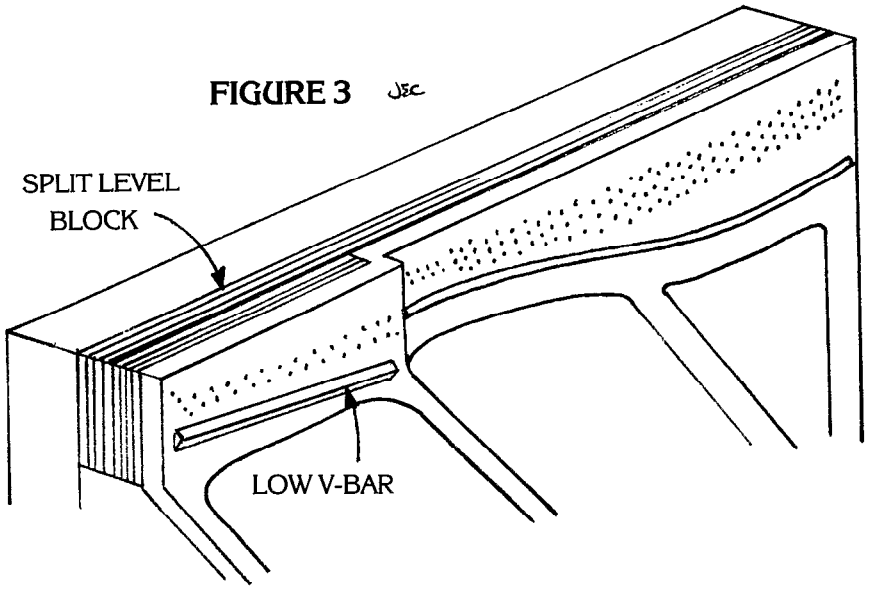
FIGURE 2 JEC

PINBLOCK LIFE

QUESTION: *"As you know we have many books available to tuners and technicians covering most of the aspects of restoring, repairing and care of pianos. But there are times when a few tuners get together that questions will arise that can only be answered by statistics based on experiences of persons who may have never written a book.*

"A group of our local technicians wonder if you could shed any light on a question that we have been trying to pin down for a long time: What would you consider a reasonable life for a pinblock in a good quality name grand piano? . . ."—James F. Toland, Linthicum, Maryland

FIGURE 3 JEC



ANSWER: Generalizations can be misleading, because too many variables are obviously at work in any given situation. The tenor of the question implies that if I say a block should be good for, say, 40 years, then any good grand younger than that can be successfully repinned. Unfortunately that just isn't true. Blocks with interior defects are being repinned constantly by well-meaning technicians who assume that if the block looks good on the outside it must be good inside too.

One of the variables is in the manufacturing process. Some blocks have more plies than others, and some use better quality wood. The type of glue used can make a difference too, and seasoning is an important factor. Among quartersawn blocks, grain orientation and closeness might well be quite different even on two pianos of identical make and age.

Another of the variables involves the technique used to fit, drill and string the block. We must remember that even if the fitting and drilling procedures were accomplished with the greatest care and precision, stringers have been known to "walk the pins in" rather than driving them straight; and even if this didn't happen, the pins may not all be the same diameter. Make a set some time and you will see what I mean. Some pins are even out-of-round, and plated pins are often fatter at the bottom than in the middle. Repinning such a block can be a real adventure even if there are no interior defects.

The other obvious variable would be the environment and maintenance level of the instrument after it was built. Some pianos receive kinder treatment than others, to say the least, and we all know about that.

The difficulty of any decision to repin rather than replace a block is that we can never know enough about that particular piano. We can make an educated guess based on the make, service record, visual inspection of the outside of the block, and an evaluation of the probable humidity extremes the piano has survived; but we still don't really *know* how that block will react to oversized pins, and we won't know until we actually repin it. By then it is too late. Too much time has already been invested in the project, and we are likely to put up with whatever torque readings we get as long as the pins will hold.

BROKEN PLATE

QUESTION: *"An incident occurred the other day while tuning a piano that has prompted me to request your immediate assistance if possible. While tuning a 25-year-old console piano, the plate cracked and broke completely off. I maintain that such an accident is not the fault of the tuner but the result of a defect in the structure of the plate itself. My client is very upset about the situation. I intend to do everything within reason to resolve this matter but I don't have any ideas about where to begin. Therefore I am requesting any ideas you might have in dealing with this situation. Specifically I was wondering if you could make a statement as to whether you would consider the tuner at fault when something like this happens. I am not sure my request is of legitimate concern to you, but as a member of the Guild for three years I thought I was at least entitled to make the request."—Robert F. DeVillez, Eldorado, Illinois*

ANSWER: If you were simply tuning the piano to its designed pitch level, then in my opinion there is no way you were at fault. I can think of five possible reasons for the breakage:

1. A sudden massive stress was placed on the plate. If a tuner had 230 arms and 230 tuning hammers and simultaneously raised the pitch of all the strings at once, that might do it. Or if glue joints in the framing of the back let go under the additional strain of a pitch raise, the plate could have bent beyond its elastic limit and broken. In the latter case, this would have probably been caused by severe changes in relative humidity over the years. If the instrument were brand new, I would say there would be the possibility of defective glue in the framing; but since the piano is 25 years old, I would tend to discount that possibility.

2. The plate was improperly fitted to the back. Again, since the piano has withstood the tension for 25 years, I doubt that this was the problem in this particular instance. But if the plate had recently been removed and refitted, such as during pinblock

replacement, the rebuilder could be at fault for not making sure of a good fit.

3. The plate flexed independently of the back. This could have been caused by the plate screws loosening, or someone might have forced the plate into a sprung position by turning the nosebolts in or out.

4. The piano was subjected to a jarring shock. If the instrument were dropped by a mover or tipped over during an earthquake, the plate could have developed a hairline crack. The small additional stress induced by the tuning could then have been the final straw.

5. There was a defect in the plate. It is entirely possible that the plate was understrength due to error at the foundry. Usually this will show up within two or three years, but not always. Changes in temperature, humidity and tension over a period of time can compound the problem, and the iron will start to crack. Once that happens, any shock or additional stress will cause the plate to break at the weak point.

The piano owner has three options: replace the piano, replace the plate (if a new one is available) or repair the old plate. You might try writing to Kelly and Wickham, the two plate foundries in Springfield, Ohio, to see whether that particular plate would be available. Or you might explore the possibility of removing the plate and having it welded. For further information on plate welding, see page 19 of our June 1979 issue.

GRAND LETOFF PROBLEM

QUESTION: *"On a grand piano the hammers will not let off close enough to the strings. The letoff buttons were raised as high as possible. I was able to raise the letoff button rail by also raising the hammershank rail. The letoff then was still not good, but better; however, when the action was put back in the piano, the drop screws were too high and were scraping against the bottom of the pinblock. What did I do wrong, or what is wrong with the piano?"*

ANSWER: Something is wrong with the relationship of the action parts, and my guess would be that either the knuckles are flattened or the striking distance of the hammer is too short. Do not confuse *blow* with *striking distance*. The *blow* is the distance between the crown of the hammer and the string, adjusted by raising or lowering the capstan. The *striking distance* is the distance between the crown of the hammer and the centerline of the hammershank, and is shortened whenever a significant amount of felt is filed from the hammer **Figure 4** illustrates this point.

Ideally, the hammer molding should be 90 degrees from the string when it strikes, and since we hang hammers at a 90 degree angle from the hammershank it then follows that at the point of impact the shank should be parallel to the string. Compression and wear will change this parallel relationship, and minor variations are compensated for by raising the capstan slightly to reestablish the proper blow distance. What we must remember is that whenever the cap-

stan is raised the whippen is raised, and the tender of the jack goes up along with the rest of the whippen. Ordinarily there is enough upward travel in the letoff button to allow for the change in height of the tender, but there is obviously a limit beyond which the button cannot function. Raising the letoff rail will not solve the basic problem in such an instrument, because the hammer will be overcentering (see **Figure 5**) and the whippen heel will be too high in relation to the key/whippen center line.

This problem could have been caused by the installation of new hammers that were too short (the striking distance is shorter than designed). If the original hammers and shanks are still in the piano, I would suggest that flat knuckles and/or excessively filed hammers are causing the problem. Replace the worn or compressed parts, and the problem will be solved.

The hammer flange rail should not have been raised. Even if this had not caused a clearance problem between drop screws and pinblock, it would have changed the distance between the hammer-shank center and the whippen center. This distance is the most critical of all dimensions and specificiations in the entire action, and simply *must not be altered.* Blow distance, key dip, damper lift, key height, jack position and other specifications can be altered somewhat to make the action perform properly, but this center-to-center distance must be considered sacrosanct. Unless it is known to be incorrect because of expansion of pot metal brackets or errant shimming, it should be left strictly alone.

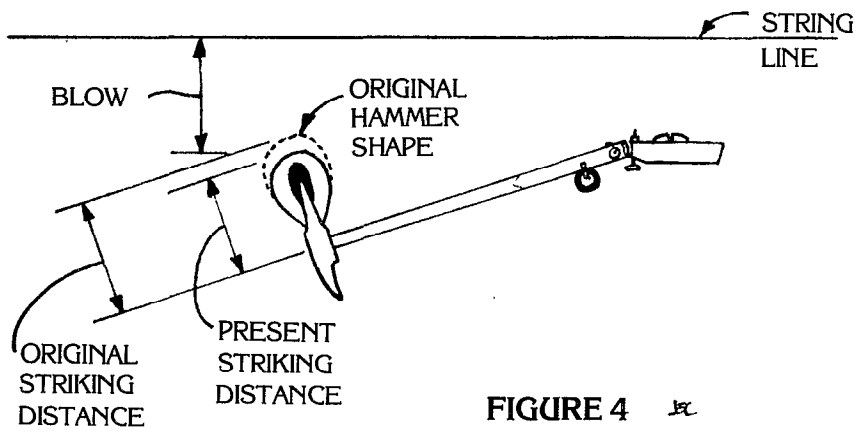


FIGURE 4

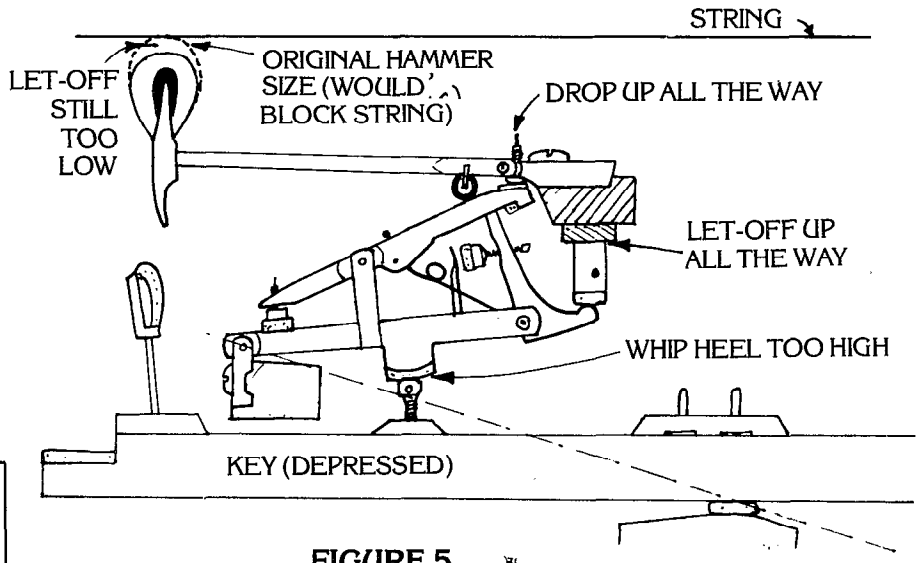


FIGURE 5

SQUEAKING PEDAL

Dean Thomas of Edinburg, Pennsylvania, relates the following account of his troubles with a near-new vertical piano:

"...I had a toughie a while back—a damper pedal squeak in a 2½ year old console. I tried everything. I lubed, tightened, and checked the grommets. The right pedal squeaked, but the middle pedal didn't. To make a long story short, the action was riding up and down on the action bracket support. Something so basic, so dependable. I had pulled the action eight or ten times without finding that squeak!"

This kind of problem used to be rare, but not so anymore. It seems that manufacturers are fastening action brackets tighter these days, and sometimes it is necessary to lower the supporting studs to remove the action. This is particularly true on actions that are mounted with machine screws threaded into the plate. If the technician forgets to retighten the support studs after replacing the action, such squeaks

can occur. In this instance, the technician who serviced the piano before Thomas probably had the action out and then didn't check the pedals.

I learned a long time ago that most of my customers can't tell a fine tuning from a decent one, and that frequently the reason they called for the tuning was not that the realized the instrument was out of tune; they called because a key was sticking or a pedal was squeaking, and didn't bother to mention it to me. I learned that no matter how beautifully the piano was tuned, they would be unhappy with my work if I didn't fix what they wanted fixed.

It's a good idea to ask the client if the piano needs any work other than tuning, and to be sure to take care of the problem before even tuning the piano. Before leaving the job, play the piano for a few minutes. Play all notes and use all pedals. When you are satisfied that everything works, invite the most critical pianist in the household to play a number while you write out your bill. This has saved me a free callback more than once, and psychologically my status is enhanced by the fact that I'm not afraid to have my work evaluated in my presence. If they don't complain right then, they aren't likely to complain later.

GLUE

Some time ago, William Bock of Los Angeles sent in some correspondence which concerns freeze/thaw cycles and aging of Titebond glue. With the permission of the Franklin Glue Company, we reprint it here. First, Bock's letter:

Franklin Glue
Columbis, Ohio

Gentlemen:

The back cover of your pamphlet of Titebond glue says, 'While not harmed by freezing...'. Someplace else it says, 'Titebond is good through five freeze-thaw cycles, after that NO GOOD.'

It seems to me the enclosed pamphlet information is true, but **very** *misleading, if the five cycles rule is correct. I have noticed my Titebond is thickening, and since it hasn't frozen, I wonder if it's aging?*

Thank you, /s/ William Bock

Here is Franklin's response:

Dear Mr. Bock,

I hope I can clarify some information concerning freeze/thaw stability of Titebond Glue. This product will indeed be unchanged after several cycles of freezing and thawing. In some cases, however, the glue appears to be curdled or separated. In these cases, the adhesive can be returned to its normal smooth consistency by stirring or shaking. As with any water based adhesive, Titebond will thicken after repeated cycles of freezing and thawing and may eventually become too thick to use. Our data sheet on Titebond Glue states that it does pass five freeze/thaw cycles. This does not mean that it is then not usable, but rather that we discontinue the test after five cycles. Experience has shown that Titebond will normally pass many cycles beyond that.

In answer to your question on aging, if Titebond is stored in an unopened container at 70° F, you will see no change in the product for at least six months and probably longer. We have seen Titebond several years old that shows no loss of its qualities. However, if the container is frequently opened and closed, as with normal use, some of the water will evaporate and the material will thicken. I believe this to be the case with your Titebond. This change in viscosity should not affect the high strength of the adhesive although there may be a slight change in the speed of set of the bond.

Should you have further questions concerning Titebond or any of our other adhesives, please feel free to contact me.

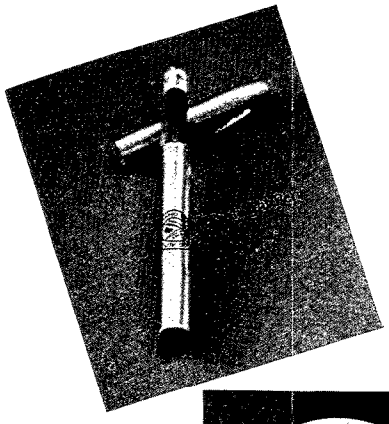
Sincerely,

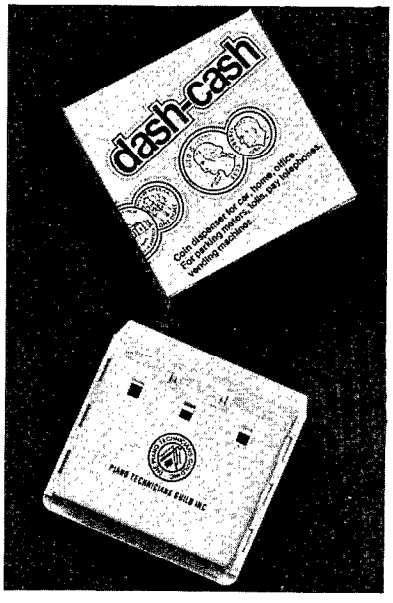
/s/ Deborah J. Watlock
Group Leader, Technical Service
Consumer Products Division
FRANKLIN CHEMICAL INDUSTRIES

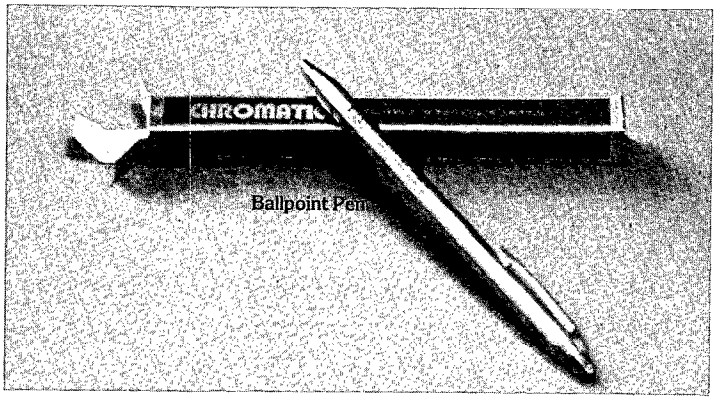
Our thanks to Bock and Watlock for this exchange. Readers who are interested in similar information on hot glue are reminded that this was covered on page 19 of our December 1978 issue.

(Continued on page 18)

Now's the Time for Christmas







Piano Technicians Guild, Inc.

INVENTORY OF SALES ITEMS

JEWELRY

For use by Registered Technicians.

Description

Membership Pin — lapel-type, gold with blue and white logo-1/$3-3/$6-12/$18
Tie Tack — gold with blue and white logo-1/$3-3/$6-12/$18 .....
Tie Clasp — bar type, gold with blue and white logo-1/$3-3/$6-12/$18 .....

BUSINESS AIDS

For use by Registered Technicians.

Description

Teacher Recital Program Covers — 5½" × 8½" attractive full-color-100/$5-200/$12-1000/$38-1000+/3¢ each ....
Billing Pads — 2-part with logo imprint, 50 per pad-1/$2.50-3/$6 .....
What is a Registered Piano Technician? — card with Code of Ethics-100/$3 .....
Service Stickers — red and blue with logo-Plain-100/$4-200/$6-500/$12 .....
Imprinted with your name/address-$45/1000 .....
Logo Rubber Stamps — mounted on wooden handle —
1¼" round logo-1/$3.75-2/$6.50-3/$9.50 .....
⅝" round logo-1/$3.75-2/$6.50-3/$9.50 .....
½" round logo-1/$3.75-2/$6.50-3/$9.50 .....
1¼" logo on piano-1/$3.75-2/$6.50-3/$9.50 .....
⅞" logo on piano — 1/$3.75-2/$6.50-3/$9.50 .....
Logo Metal Cuts — reusable metal on wooden blocks —
1¼" round logo-$7.50 each .....
⅝" round logo-$7.50 each .....
½" round logo-$7.50 each .....
1¼" logo on piano-$7.50 each .....
⅞" logo on piano-$7.50 each .....

MISCELLANEOUS

For use by Registered Technicians.

Description

Logo Stickers — peel-off backing, blue/gold/white —
8½" logo-1/$3-2/$5-6/$10 .....
3½" logo-1/$1.50-2/$2.50-6/$5.50 ....
1½" logo-10¢ each (Min. order 10) .....
Logo Stickers — peel-off backing, black/gold —
1½" logo-10¢ each (Min. order 10) .....
Coffee Mugs — white pedestal/blue logo — 1/$4-2/$7.50-4/$12-6/$16.50 .....
Flashlight Pens — gold, comes with battery-1/$4.50-2/$8 .....
Bumper Stickers — yellow/blue/white piano keys-$1.50 each .....
Pocket Protectors — white vinyl with blue logo-3/$1.25-6/$2 .....
Logo Emblem Patches — colorful 3" sew-on patches-
Blue/White-1/$1.75-3/$3-6/$4.50 .....
Blue/Gold-1/$1.75-3/$3-6/$4.50 .....
Black on Gold-1/$1.75-3/$3-6/$4.50
Dash Cash — *emergency coin dispenser*, white with blue logo-$1.75 each .....

BUSINESS AIDS

For use by all members

Description

Piano Service Appointment Forms — small, green 5-part — 50/$4.50-100/$8-500/$30 .....
Piano Service Contract — letter-sized, 3-part-10/$2.50-50/$6-100/$9 .....
Piano Service Sales Agreement-*letter-sized*, 2-part-10/$2-50/$5-100/$8 .....

MISCELLANEOUS

for use by all members

Description

Ballpoint Pens — gold, writes blue and red-1/$3.50-2/$6 .....
JOURNAL Binders — brown with gold letters-$6.50 each .....

LITERATURE

For use by all members

Description

Pamphlets — all are 100/$5-200/$8-500/$17-1000/$30
Care of Your Piano .....
Piano Pointers .....
Reminder Cards .....
"How Often Should My Piano Be Tuned?
The Unseen Artist .....
A-440 and Your Piano .....
"Should I Have My Piano Tuned in the Summer?" .....
Baldwin Postcard .....
Piano Action Handbook — by Merle Mason-$2.50 each .....
Piano Parts and Their Functions — by Merle Mason —
Members-$14 hardcover-$10 softcover
Nonmembers-$18 hardcover-$14 softcover .....
Chapter Publicity Manual — $5 each ....

PAMPHLETS AND CHAPTER MANAGEMENT AIDS

Description

All items below are available free from the Home Office.

The Piano Technicians Guild-"The Facts" ..
Members Benefit List .....
Magic Kingdom Club Application .....
"Thank You for Your Membership Inquiry ..
Lending Library List .....
Reader's Digest Reprint: "The Other Masters of the Keyboard"-limit 10 per order .....
Serviceability Improvement Suggestions Form .....

Orders totaling less than $10 must be paid in advance.

SHIPPING AND HANDLING

If order totals:	Below $5.00	$5 to $9.99	$10 to $14.99	$15 to $24.99	$25 or More
Add:	$1.00	$1.50	$2.00	$2.50	None

Washington State residents only add 5.3% sales tax.

PLEASE FEEL FREE TO PHOTOCOPY THIS SALES ORDER FORM

TECH TIPS

1. A safety pin is useful when replacing a wound string in a vertical piano, particularly if that wound string is on the treble bridge behind the bass strings. Simply fasten the safety pin through the loop of the new string and around an adjacent string near the top (**see Figure 6**). Depress the damper pedal to get the dampers out of the way and slide the new string down into position.

2. A discarded copper winding from a bass string makes a good space filler in a stripped screw hole. Cut the copper to the length of the threads, put it into the stripped hole, and insert and tighten the screw. The threads will bite into the soft copper and provide new purchase for the screw.

3. Another way of doing the same thing is to insert a toothpick into the stripped hole. Break it to desired length, or double it if necessary. A bit of glue on the toothpick will keep it in place.

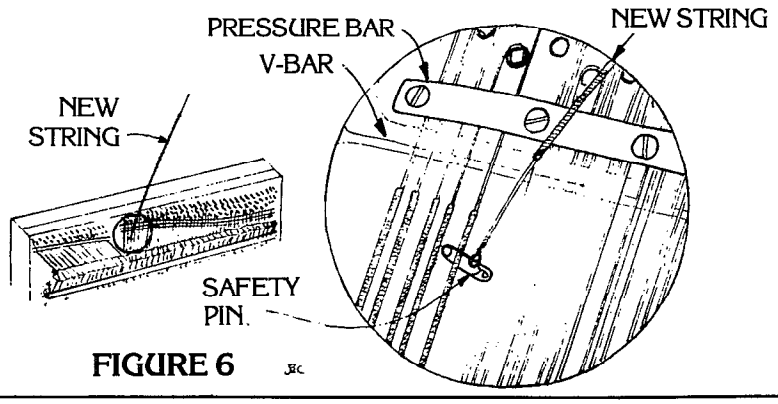


FIGURE 6

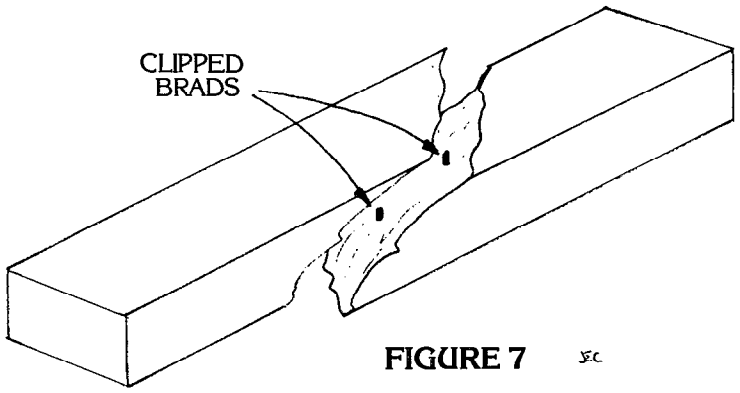


FIGURE 7

TIP OF THE MONTH

When gluing two pieces of wood together, usually there is no problem with holding the pieces together with some type of clamp. Even irregularly shaped or decorative parts can be clamped, if only with tape, rubber bands or strap clamps. Usually, the main problem involves keeping the pieces from slipping sideways while clamping pressure is being applied. The glue unfortunately acts as a temporary lubricant.

One way to keep the parts aligned is to drive two brads partway into one of the pieces to be glued. Clip the heads of the brads after driving, leaving about ⅛" of each brad protruding. Then position the parts carefully without glue and press them firmly together. The clipped brads will leave an impression in the second piece of wood (**see Figure 7**). This will serve as a positioning guide after glue is applied, and the brads will keep the parts aligned regardless of clamping angle or pressure.

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

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(2) Mail Subscriptions	3,470	3,535
(C) Total Paid Circulation	3,470	3,535
(D) Free Distribution by Mail, Carrier or Other Means, Samples, Complimentary, and Other Free Copies	65	74
(E) Total Distribution	3,535	3,611
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I certify that the statements made by me above are correct and complete. — (signed) Sandra L. Parsons, Managing Editor

Clifford A. Geers and Jack Krefting

Grand Hammer Installation

When a new set of hammers arrives from the manufacturer or supplier, the technician should first check to be sure the hammers will fit the piano. After counting to be sure there are enough usable hammers for both treble and bass sections, check the striking distance. This is the distance from the center of the hole in the hammer molding to the striking surface, and will be somewhat longer than that of the old, worn set. This was, of course, taken into account when the new hammers were ordered.

It is a good idea to number the new hammers before removing them from the wrapper, as any technician who has ever dropped a set will agree. They can be numbered anywhere, but a good spot is on the inside of the tail. Make some kind of distinguishing mark on the end hammers of each section and discard the extra hammers. The decision as to which hammers will be discarded will depend to some extent on the number of angle-bored hammers in the tenor, and the number of outsized or deformed hammers included with the new set. Keep the largest good hammer for #1, and the smallest good hammer for #88. Discard the smallest bass hammers, and any extras to be discarded in the tenor and treble should be selected out at random.

Each end hammer of each section should be scribed along its centerline with a fine pencil line. This is done by making two reference marks on each side of the molding; one at the tip and one in the middle or closer to the tail (**see Figure 1**). Then a straightedge is aligned with the two reference marks and a line is penciled along the straightedge all the way to the crown. The purpose of this line is to allow these end hammers to be glued at exactly 90 degrees to the shanks, assuming the piano was designed that way. In either case, the hammers **must** strike the strings at 90 degrees. This can be checked in the piano with a small square measuring the angle from string to hammer. This reference mark should be drawn on both sides of each end hammer, and then a connecting line should be drawn across the striking surface of the felt (**see Figure 2**). On all angled hammers in the tenor and bass, an intersecting line should be drawn to form a cross at the very center of the striking surface.

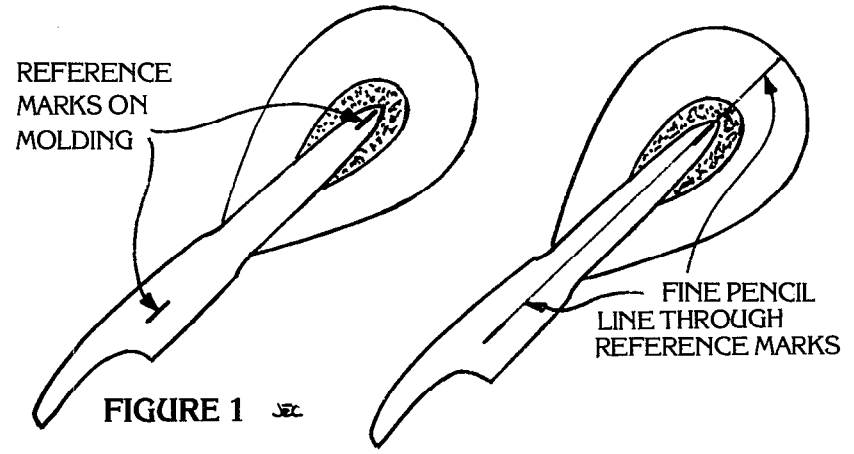


FIGURE 1

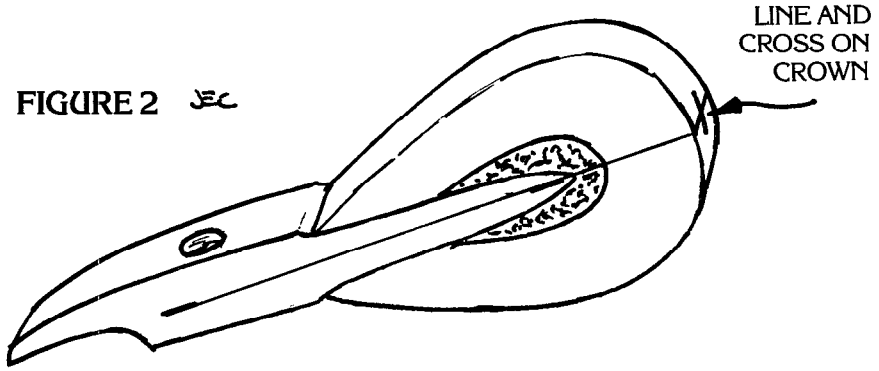


FIGURE 2

Before removing the old hammers, place the action in the piano to check the strike point. It should never be assumed that the old set was perfectly positioned; improvements can sometimes be made. Most scales are designed so that the hammer strike point will be in a perfectly straight line from treble to bass, but as a practical matter this doesn't always prove to be ideal for every note in every scale. A carefully planned deviation from this straight line, particularly in the high treble, can sometimes improve the sound of the instrument. Sometimes this improvement will already have been made in the top two sections by the factory hammer installer, but check it anyway.

With the keyblocks in position, check the tone quality and volume of C88. Play the note several times using a fairly hard blow, and remember how it sounds. Now remove the keyblocks and move the action slightly in or out while playing C88, listening for the best sound. If the dags behind the keyframe prevent moving it further into the action cavity, slip a screwdriver between keyframe and keybed and pry the front of the keyframe upward an inch or so. This will cause the hammer to strike the strings slightly further from the capo bar, simulating the tone quality and volume level that might be expected if the strike point were moved to that position. Locate the strike point wherever the sound is the clearest.

Now check the tone quality and volume level of the lowest hammer in the top section. If we deviate at all from a straight line, it will be at this point. Check this note in the same manner as was done previously with C88. If in doubt about whether to alter the strike point in this area, the technician might consider removing the hammer and regluing it at the proposed new position on the shank. When the glue is dry, the tone quality on that note may be compared with that of the undisturbed adjacent notes. Make a note of any changes that will be made in the strike point.

Although there are occasions where the existing shanks and flanges might be retained when replacing the hammers, usually if the hammers are worn to the extent of having to be replaced the shanks should be replaced also. The three critical points are (1) the condition of the hammershank centers; (2) the roundness and texture of the knuckles; and (3) the possible brittleness of the wood in the old shanks and flanges. In the event that the old shanks are to be retained, remove all old hammers except the guide hammers at the ends of each section and clean the old glue from the shanks. Repin and repair the shanks as necessary, checking also for straightness and correct traveling.

If new shanks and flanges are to be installed, mark and save the guide hammers and shanks at each end of each section; remove and discard the rest. Peel the old paper or cloth from the rail and scrape it lightly to be sure of a flat surface. Then cement new sandpaper to the rail, grit side up. Contact cement works admirably in this application, but almost any glue will do the job so long as it leaves no lumps under the sandpaper. Punch holes in the paper with an awl at the screw holes, and install and travel the new shanks and flanges.

Ream all hammers to fit the shanks. Turn the hammer frequently while reaming to avoid changing the boring angle, assuming that angle is correct. Examine the old hammers to see whether the string cuts are parallel to the sides of each hammer as they should be. If they are not, then the technician should deliberately change the boring angle while reaming. The correct angle of any hammer is determined by the angle of the strings, not the angle of neighboring hammers. Ream from the front side only, so the hole will be tapered for a loose fit in front and a snug fit in back. This will allow the angle of the hammer to be changed before the glue dries if necessary for proper alignment. Plane or sand the sides of the tails as necessary for clearance. For a balanced hammer, taper both sides of the tail down to a width just slightly smaller than that of the backcheck. A small block plane and a bench hook can be used to advantage for this job.

Remove the next to last shanks from each end of each section, and fasten the old guide shanks and hammers in these positions. The old #1 shank and hammer will be in the #2 position, the old #88 will be in the #87 position, and so on. Cover the whippens to protect them from glue drips. If there is removable shank rest rail, turn it over so the shanks rest on the wood while gluing. Otherwise, block the shanks up on a straight piece of wood laid across the back of the whippens. Now begin gluing the new end hammers in place on the end shanks of each section. Use a small square to get them straight in a side-to-side plane, and a hammer square to be sure they are glued exactly perpendicular to the shanks and strings. Again, if the shanks and strings are not parallel when the hammer touches the strings, compromise only on the shank/hammer angle. Above all, the hammers must be perpendicular to the strings on impact.

Figure 3 illustrates a method of making a hammer square from a scrap piece of flat steel. Hold the wide part against the shank, and glue the hammer so the narrow part is aligned with the scribed centerline on the hammer. Glue on hammers #1 and #88 first, aligning them with the old guide hammers in positions 2 and 87. Then hang the lowest hammer of the top section, remembering to allow for any change in strike point that may have been decided upon earlier. As the remaining end hammers of each section are glued in place, the strike point is checked by stretching a piece of thread along the tops of the hammers, lining up the pencil marks. If any strike point change was made at the lowest hammer in the top section, alignment of the other end hammers should be in a straight line from that point down to the number one hammer (**see Figure 4**). Otherwise, stretch the thread from #1 to #88. Glue the top bass hammer last, as it is the most difficult to align. Check all end hammers with the square before the glue hardens.

Hot animal glue is excellent for hammer hanging because it achieves its initial set by cooling rather than evaporation. It has good gap-filling characteristics, makes nice glue collars around the shanks, and is removable if a mistake is made. Titebond is good also, especially if allowed to stand in an uncovered jar to thicken somewhat before application. Never use epoxies or super glues for this purpose, because the joint doesn't require such massive strength; and if you ever have to remove an epoxied hammer from a shank, the wood around the joint will be destroyed before the

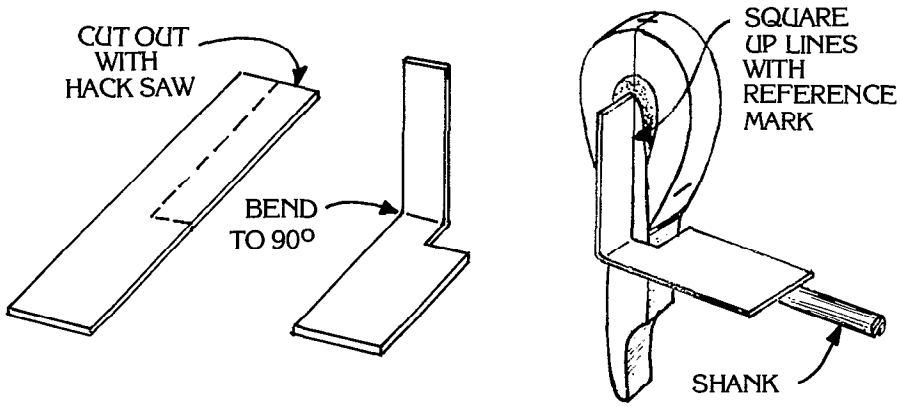


FIGURE 3

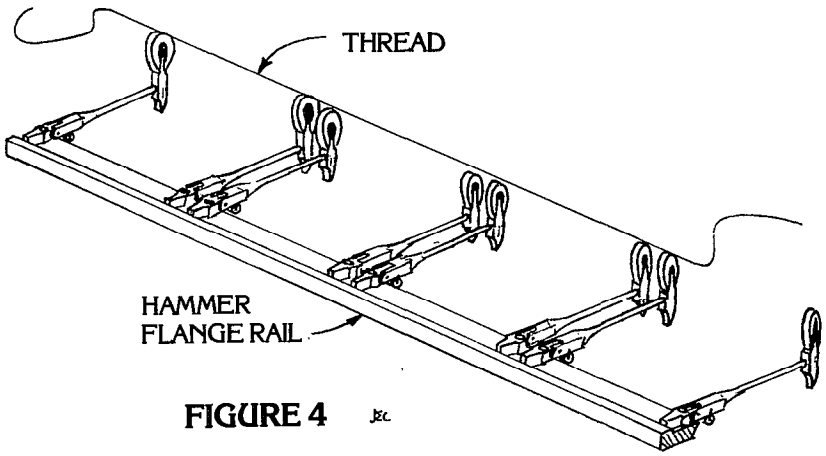


FIGURE 4

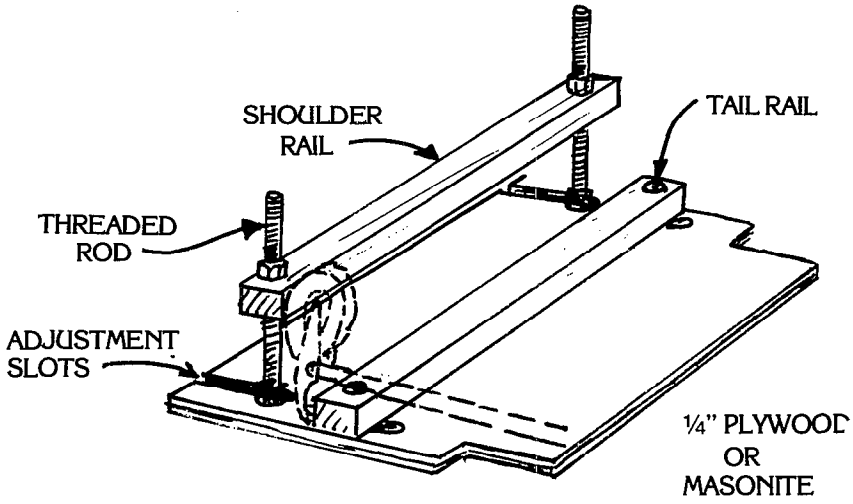


FIGURE 5

joint will separate.

Apply glue to both shank and hole, and twirl the hammers on to form an unbroken glue film and a good collar. When all end hammers are installed, hang the remaining hammers using either a hammer hanging jig (**see Figure 5**) or a straightedge. Be sure all hammers are aligned both at the shoulder and at the tail. Because of the usual straight boring angle in the high treble, this is the easiest place to start. Using a jig or straightedge and occasionally double-checking for straightness with the square, these straight-bored hammers can be hung quickly and easily.

Gluing the angled hammers in the tenor and bass is somewhat more difficult. Because of the angle, these hammers are operating in two planes instead of one; to complicate this further, if the scale spacing is the same as in the treble, the sides of the hammers will be closer together in the bass. This principle is aptly illustrated by looking at a venetian blind while adjusting it to various positions — when half closed, each slat is closer to its neighbors than when wide open, even though the center spacing remains the same.

The hammer must be vertical in both planes when it strikes the string, so it then follows that it cannot be vertical when at rest. The bass hammers must be inclined slightly to the left, and the angled tenor hammers slightly to the right. This inclination, in combination with the thinning of the tails, should provide the necessary clearance.

Many technicians have trouble getting the proper inclination, and end up doing a lot of burning later to get everything aligned. Here is a suggested method of predetermining the precise side angle: Instead of reaming all hammers before starting, ream only the straight-bored ones and proceed to install them as outlined above. Then carefully ream the angled hammers just enough so they will fit very snugly on the shanks. Put them all on without glue, adjusting the side angle of each hammer until all will lift and fall without touching one another. This will be the correct gluing angle, and can be proven by raising any hammer to the string height and checking for squareness in both planes (side-to-side and fore-and-aft). Now remove every fifth hammer or so, ream it fully and glue it in place while its neighbors are still dry-fitted in position. These hammers will serve as angle guides for the remaining hammers, which can now be removed, reamed and installed.

When the glue is dry, the shanks must be trimmed. If a coping saw is used for this, the shanks must be clamped solidly together or the sawing motion will ruin the center pinning. Another way of trimming is to use a ¾" Dremel circular saw mounted in a Moto-Tool. This works very well, but must be done with a careful and steady hand because the machine is quite capable of severing a finger as well as the shank.

With the shanks still firmly clamped together, plane or sand the tails to a uniform shape for mating with the backchecks. If a plane is used for this operation, it must be razor sharp to prevent damaging the

pinning. **Figure 6** illustrates that the radius of this curve should be the same as that of the hammer swing. A very slight rounding of the bottom edge will prevent undue wear on the backcheck, but do not make the common mistake of rounding the tails like toboggans; that only reduces the area of the surface that will touch the backcheck. The greater the contact area of the tail, the better the checking will be.

After the radius has been made, roughen the tails by sanding them in a horizontal direction with very coarse sandpaper. Now remove the clamps from the shanks and doublecheck the alignment of all hammers. Travel them once more, and then correct any misalignment by burning and spacing the shanks. This must be done before filing, otherwise the crown of the crooked hammer will be filed at an angle. Gang-file the treble hammers, three or four at a time for efficiency and uniformity, but naturally all angled hammers will have to be filed individually. An 80-grit open coat garnet paper works well for this operation on new hammers, since we are not removing as much felt as when reshaping an old set.

Polish the crown and shoulders of each hammer with 220 paper, pulled in one direction only to avoid fuzzing the surface. Replace the stack on the keyframe and put the action into the piano. With the keyblocks in place, space the hammers to the strings*. Then lift each hammer to the strings by pressing upward on the jack tender and pluck each string in that unison. Assuming the dampers are raised out of contact with the strings, any open string in that unison will ring. The technician must then determine the cause of the open string — either the strings aren't level or the crown of the hammer was filed incorrectly — and correct the condition.

When the hammer strikes the strings, it must strike all strings of the unison with equal force and at exactly the same time; otherwise the piano will have an unnecesarily harsh tone quality. If there is an open string in a particular unison, as indicated by plucking with the hammer touching the strings, the technician can determine whether the strings of that unison are level with each other by running a finger back and forth across the unison at the strike point. Level the unison by gently prying the strings right next to the agraffe, but be sure to check the results at the strike point, not at the agraffe. We don't really care whether they are level at the agraffe, because that isn't where they will be struck.

When the strings are level, any openness has to be the result of erratic hammer filing. This must be corrected by selectively filing the high spots on the hammer with a strip of sandpaper ⅛" wide. When the hammer is dressed so that open strings are eliminated, throughout the scale, the piano is ready to be voiced; the installation is complete.

**In some pianos, notably Steinway, a different procedure is used. Refer to our October 1979 issue for details on Steinway spacing.*

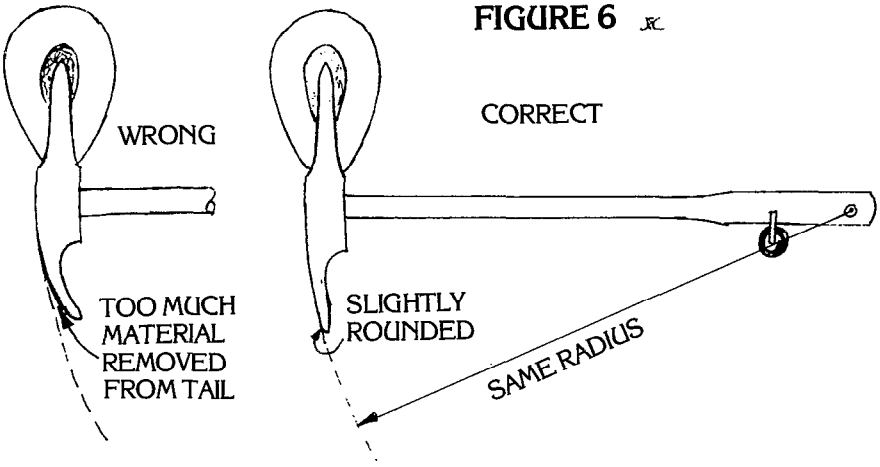
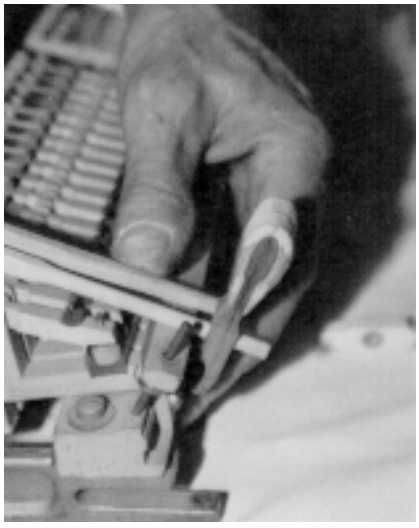


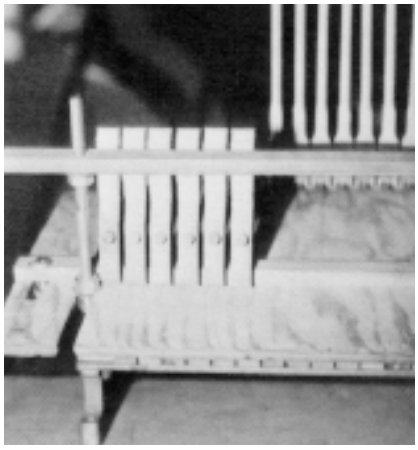
FIGURE 6

1. Hammers are reamed with a tapered reamer from the front side.



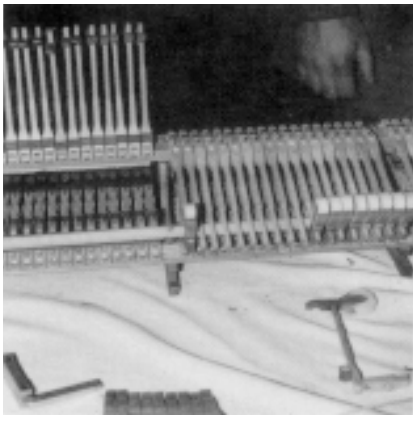
2. Strike point is maintained by aligning the new #88 with the old guide hammer.

3. A thread is stretched across the marks on the end hammers. In this instance, the strike point of #71 has been altered.

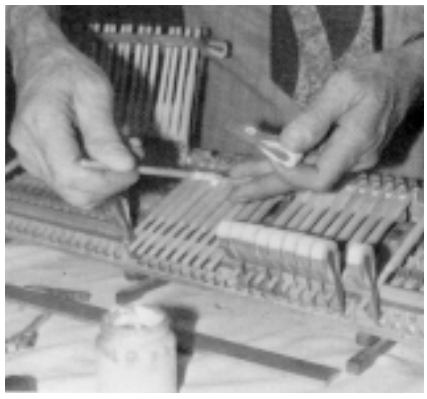


4. Hammers may be hung with a homemade jig, shown here, or with a commercial jig or with a straightedge.

5. The jig is set up to hang the middle section. End hammers are in place, touching adjustable jig at both shoulder and tail.



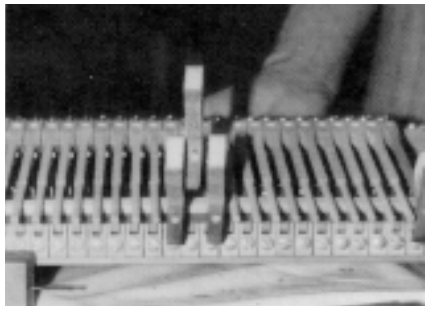
6. Hammers may also be hung without a jig. A straightedge is used to line hammers up at shoulder and tail. Note that rest rail has been reversed for even support of shanks while gluing.



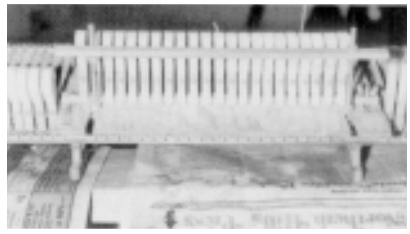
7. Glue is applied to hole in molding as well as to the shank.

8. Hammer is twirled two or three times for a good collar.

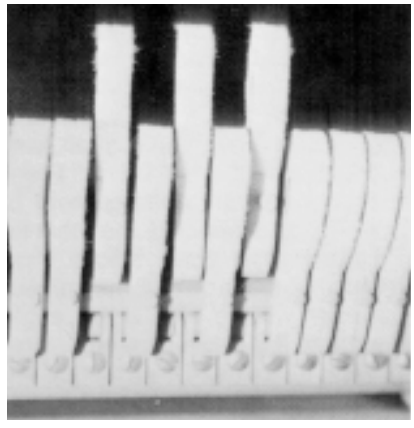
9. Check for side angle with small square on adjacent shanks.



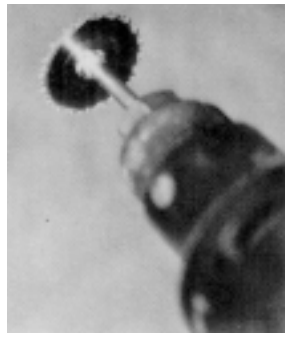
10. Note the interference between hammers that are not quite square with adjacent shanks. At rest, these hammers appeared to be in good alignment.



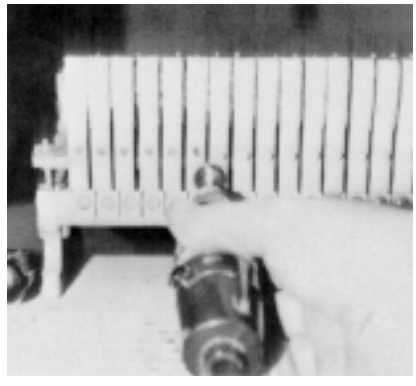
11. Middle section after installation. Note the angle boring on the tenor hammers. The protruding white lines are travel paper, not yet torn off.



12. When hung at the correct side angle, the bass hammers will not touch one another. If they do, burn the top of the hammer toward the interference and space the shank back.



13. The Dremel ¾" circulat saw, available for under $2 where Dremel tools are sold.



14. The saw neatly trims off the excess shank. The hammer should be supported with one hand (not shown).

Newton J. Hunt

ACCENT ON TUNING INSTABILITY

In speaking to our customers about what causes a piano to go out of tune, the most common subject is the weather. A change in temperature will have little or no effect on the tune of the instrument except that most temperature changes are directly coupled to a change in humidity, which is a subject well-covered by Don Galt in the July 1979 Journal. Humidity change is the major factor when pianos are tuned two or more times a year.

The next most comon factor is string stretch. It takes very little stretch, as we all well know from what a new string does, to make a piano sound horrid. Several years of tunings are needed to get all the stretch out of new strings. The newer pianos seem to go out because of settling of the structure as well as the stretch of the strings, but I have no proof of that.

Time itself, with the changes of weather, string stretch and structure, all cause the tuning to slide downward.

Hard playing and especially hard hammers will knock out the tuning of even the best tuner and the best piano.

One factor that seems to be rather neglected is the degree of sensitivity of the client. Some pianists are on the phone the instant the piano thinks about going out of tune, others can let the instrument go for ten years and not know the difference.

After the piano is settled in and the weather, stretch, age, time and customer demands are compensated for any real problems of the instrument itself can be considered.

One comon cause of tuning instability is pinblock-back separation, where the pinblock is being pulled away from the back posts of uprights by the tension of the strings. This is most easily spotted by looking at the top of the assembly or from the bottom of the block. When the sides begin to separate from the back a weak piano plate and back can flex more than planned by the designers; tapping with the knuckles along the side will produce a hollow sound where the glue has failed.

A goodly number of pianos were produced with aluminum/magnesium plates that over-extended periods do not have the rigidity and stamina of cast iron. This is a chronic problem without any real solution for that instrument.

When the smaller pianos were in their developmental stages, many of their unique problems were yet to be solved. One of which was determining the minimum weight and the structural rigidity for long-term integrity. Some of these early instruments tend to be unstable because of weakness and, of course, because of advanced age.

Closely related to the above is poor or improper scaling. Today there seem to be several instruments available that can yet be improved in this area, but many of the older spinets were and are unstable because of poor scaling.

As mentioned earlier, overly hard hammers can cause a piano to go out of tune because of the severe shocks to the strings, the excessive energy imposed on the friction system of the strings which helps the strings to ride up on the bridge pins.

If the plate screws and bolts are just a little loose the piano will not be nearly as stable as when they are tight. I know one tuner who tightens the plate screws on every new client's piano, and every year in the dry season as well. I do it often (once every two years or so) on all my large or critical instruments.

One seemingly insignificant point is one overturned screw in the plate. Any lack of mechanical integrity introduces that much instability. That overturned screw must be replaced or the hole plugged and redrilled.

Along the same lines, if there is a gap, as thin as a piece of typing paper more than three or four inches long between the plate flange and the pinblock of a grand, the stresses placed on the block by the pins will try to force that space to be filled by the block. This should be checked just before the dry season is over. The gaps can be filled with very thin, long maple shims that have been dried out thoroughly so that any moisture in the air will cause the shim to swell after it is installed. Using epoxy will not swell the wood for a tighter fit.

Sometimes the plate is warped or the pinblock is warped so that there is poor contact between the two. This is especially bad in the tuning pin area. If this is the case then a new block is in order or a long fitting process is required.

A pressure bar that has been screwed down too far can make tuning difficult and contribute to string breakage. A close examination of the area should indicate if this is the case. Generally speaking, the pressure bar should be set so that the strings will remain in position no matter how hard they are struck and so that it introduces some friction so that the tuning pin is not doing all the work. On average, fourteen degrees is sufficient.

With time, the strings will conform to the bearing points; the V-bar, pressure bar, bridges, aliquots, agraffes, bearing pins, etc. When you remove an old broken string you can see the bends in it. These bends have to be straightened out, and to some degree, made again when the pitch of a string is changed. In newer pianos the strings make nice curves around these points, but in the older ones they conform and contribute to string breakage, difficult pin setting and to tuning instability.

Excessive friction caused by corroded strings, capo bars, pressure bars, V-bars and bearing bars and occasionally with contaminated bearing felts generally tend to con-

tribute little to the ease of tuning.

Poor hammer technique and poor pin setting are a major source of customer complaints about the tuning instability of their pianos. You should always inform the customers that if there is a problem with the piano to call you immediately. This gives you the chance to go and check the instrument to determine if it is at fault or if you need to retune the piano and concentrate more fully on your approach to the job. Please refer to the June 1979 Journal article on hammer technique.

Tight tuning pins and tuning pins that are very high from the plate are difficult to tune, but are not impossible. They just take more time. Coils that are more than ⅛" from the plate are in no manner justifiable. These pins should be driven down and properly leveled with tight coils.

The final note on my list is loose tuning pins. How loose is too loose. If you can raise the string to pitch and the tension of the string pulls the hammer around, that is too loose. Also too loose is if you return to a piano after only a few months and find several notes playing major or minor triads.

Too loose is when, even if the pins are tight by measurement (above 75 inch pounds), but they are still a major third low a few months later. These pins may be contaminated with something like oil or silicone which will not allow the wood to grasp the pin for long periods. A new block may be in order.

Even if the block is generally loose, it does not mean that the piano is untunable. I have tuned pianos where every string would turn the pin around, but I could get the block to lock into the pin by raising it to the exact point I wanted, holding steady for just a second, then gently releasing the pressure and gently lifting the hammer off the pin. When the weather changed was when I earned my fee.

I prefer pins that are not too tight; I don't have to work so hard and have some energy left for writing articles.

If it can be made to stay it is not too loose. European pianos generally do not have pins that are as tight as some of our pianos, yet they stay and stay and stay and . . .

The degree of looseness is not as important as its staying ability, which is determined by the bearing point angles, the friction across all bearing points, the angle of the tuning pins to the block, the angle of the string to the pins, the texture of the block and the patience of the tuner.

Unless the cause is obvious and until the piano has been tuned at least once by yourself, go cautiously and carefully, as you would like someone to go with your car or TV or with whatever you have a major emotional investment.

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.

January 11-12, 1980
ARIZONA STATE SEMINAR
Tempe, Arizona

Contact: Carl Bates
4112 West Caron Street
Phoenix, AZ 85021

February 18-19, 1980
CALIFORNIA STATE SEMINAR
Santa Clara, California

Contact: Bill Klein
219 E. St. John St. #3
San Jose, CA 95112

April 10-12, 1980
PACIFIC NORTHWEST
CONFERENCE CONVENTION
Vancouver, British Columbia

Contact: Al Seitz
1517 Medfra
Anchorage, AK 99501

April 11-12, 1980
NEW ENGLAND SEMINAR
West Lebanon, New Hampshire

Contact: George Wheeler
11 Cherry Hill
Springfield, VT 05156

April 18-20, 1980
PENNSYLVANIA STATE
Altoona, Pennsylvania

Contact: Fred Fornwalt
1333 Logan Blvd.
Altoona, PA 16602

April 26, 1980
LOS ANGELES ANNUAL
TECHNICAL SEMINAR
Los Angeles, California

Contact: Daniel A. Evans
4100 Beck Avenue
Studio City, CA 91604

April 29, 1980
MID-SOUTH SEMINAR
Nashville, Tennessee

Contact: Ronald Croy
3214 Jonesboro Drive
Nashville, TN 37214

Raye McCall

The Vacuum Line

In the last article I was talking about the Kimball player. There is yet more information which you will need to have in order to service it properly.

If you recall the discussion about Kimball, you will remember that I had given instructions about the removal of the top tray. This is done for accessibility in tuning. Should it be necessary to remove the piano action, there is no problem, as long as the top tray is out. Just use a bit of caution, because there is tubing at both ends. When you have completed your work and are ready to replace the top tray, here are some suggestions of things to watch for.

First, be certain that the tubing slides down as the top tray is lowered. Also, be careful that none of the rinky-tink buttons hang up in the tuning pins. To finish reinstalling the top tray, simply reverse the steps for removal. Now look in the bottom of the piano. Notice that at each end where the kick panel goes in, there are wooden dowels. BE SURE THERE IS NO TUBING IN FRONT OF THESE PINS!! If you put the panel back in place with tubing between it and the dowel pins, the tubing will be pinched and you will have a note or some other function which is rendered inoperative.

In the older model Kimballs, they used two small electric motors on the roll box. One was used in play, and the other for reroll. While one motor was working, the other coasted. This arrangement was the source of many problems. Both motors operated through reduction gear boxes. The gears would become noisy, and emit an obnoxious whine while the roll was playing. The reroll motor was connected to the shaft in the roll box by means of a short piece of rubber tubing, which occasionally would get twisted in two due to a malfunction at the end of the play cycle. When this happens you can replace it using a piece of automobile windshield wiper hose which, of course, is available at your friendly auto parts store.

The last information I had was that these motors are no longer available. Therefore, when replacements are needed, it looks like we might have a real problem. Does anyone have any suggestions??

Since the Kimball is all electric, there are safeties built into the circuitry, called fuses. One amp, five amp, and 15 amp fuses were used. The 15 amp was the glass screw-in type and was located on the back of the piano. It was only found in the very early models. Later there was a five amp fuse for the vacuum generator only, and located immediately beneath it. The one amp fuse in the early models was in an aluminum box located in the center of the top tray. This fuse was later moved into the rear of the cheekblock control box. When it has blown, it should be replaced with a two amp slo-blo fuse. In the later Model D, the fuses have all been replaced with circuit breakers.

In the Model D Kimball the tracking pneumatic is controlled by a balance block. This block is made of clear plastic, has six tubing connections and is located near the vacuum generator. There are two very small orifices in it which frequently become plugged with lint from the paper. To clean it, disconnect the tubing and blow through it. There are two tubes connecting to one end, and four to the opposite end. If you blow into the end to which the two tubes connect, this will reverse the flow of air that it normally has and will cause a flushing action. Be sure you keep track of the tubing connections so they can be reestablished correctly.

There are service manuals available for the players which are currently being manufactured. It would be well for you to take the time to contact the manufacturer and obtain the manual(s) which you anticipate needing. In this way, you will not be stumbling around in unfamiliar territory and you can service players more efficiently.

The next player that should be discussed is the Wurlitzer. This player has an electric vacuum pump, and will play the same rolls as the two makes which have previously been covered. This is where the similarity ends. The operation of the Wurlitzer player is quite different, a bit more trouble-prone and requires that the technician be able to read a schematic and understand electronic circuitry in order to do an adequate job of servicing the unit. From the standpoint of accessibility for tuning, it will compare favorably with the new Aeolian units. The Wurlitzer rollbox assembly hinges forward, making tuning very easy.

From my experience in servicing this player, there seem to be two problems which occur quite frequently. It is paramount that the tracker bar be kept clean. It is well to stress to the owner the necessity of frequent cleaning of the tracker bar. This can easily be done using the crevice tool on a vacuum cleaner. This is a good procedure to use on any tracker bar. The Wurlitzer tracker bar has tiny pistons immediately behind what we recognize as the note holes. If these little pistons get dirty, they will hang up so that a note does not work. Another difficulty with this player is the tracking system. There appears to be two reasons why trouble is experienced here. One, the tracker is a single-sided device. It senses only one side of the paper. The sensing is done by a small, very sensitive finger protruding through the right-hand end of the tracker bar. This finger is connected to a micro switch, and can easily be bent. This leads to the second part of the problem. I have found that the owners do not understand how to properly adjust this little sensing finger.

It is just excellent public relations

to take the time to make sure your clients understand their players. They will realize more enjoyment and have greater esteem for you. If you do not understand them, there are at least two ready sources of additional information. The author of this column will entertain your questions, or you can obtain and study service manuals which the manufacturers will gladly make available to you.

Eloise Ross, Sunset Insurance Associates

Your Security Blanket

We all know an adequate source of income for life is needed when our "earning" years are ended. Social Security was never designed to provide more than a *survival* income to which personal savings must be added to provide an *adequate* income.

Those who established a retirement plan for themselves and/or their working and/or non-working spouses need not read on; you already know the tremendous savings and advantages (now) of providing an adequate income at retirement.

Those who are still procrastinating read on; maybe what you read will activate your good intentions.

Our inflationary economy makes it difficult to save. It is even more difficult to accumulate retirement dollars when taxes must be paid *first* on these dollars and on the accumulated dollars, too.

What then is the answer to the retirement dilemma? One possible answer for the self-employed is to use the Keogh (HR 10) or IRA (Individual Retirement Account).

The Keogh plan allows the self-employed to set aside 15% of adjusted gross income or $7,500, whichever is less. Employees who have been employed three years or longer must be put on the plan for the same percentage of compensation as the employer. The employee is 100% vested (has right to full account of funds) at death, disability, retirement or termination prior to retirement.

The employer may also set aside an additional $2,500 which is not tax deductible (after tax dollar), but the fund accumulations are not taxed until received.

The IRA plan allows one (employer or employee) to set aside 15% of compensation or $1,500 per year, whichever is less ($1,750 for working spouses, and non-working spouses, $875 each).

What are the advantages? Two major considerations: contributions are tax deductible from adjusted gross income *and* earnings on accumulations are tax free.

What are we really talking about in relation to all this talk and dollars? The following comparison based on a $1,500 per year contribution assuming 8% interest compounded annually and a 30% tax bracket:

Years	Ordinary Savings ($1,050 per year after taxes)	Individual Retirement Annuity Program ($1,500 per year)
5	$ 6,200	$ 9,358
10	14,343	23,107
20	39,074	72,991

So, what will this do at retirement? (Using the same formula).)

MONTHLY RETIREMENT INCOME

($1,500 Annual Deposit)

	Monthly Income Guaranteed at Age 65		Monthly Income Currently Being Paid at Age 65	
Age at Entry	Male	Female	Male	Female
25	$959	$869	$3,285	$3,057
30	743	673	2,185	2,034
35	566	513	1,436	1,337
40	420	381	927	863
45	300	272	580	540
50	202	183	344	320
55	121	110	183	171
60	55	49	74	69

Please note the dramatic difference in amount of monthly income when started at age 25 as opposed to age 50. This clearly shows the need to start tax sheltered retirement savings NOW. Remember, IRA or Keogh, prior to December 31, 1979.

For more specifics on how to do it, write Sunset Insurance Associates, 510 NE 65 St., Seattle, WA 98115 or call me at (206) 524-8510.

Luellyn Preuitt

Auxiliary Exchange

From the desk of the President: "November — an interlude month. It always reminds me of the evening shift, when I was working at my profession as a registered nurse. During the time of duty we carried on with the day duties routine, then had a brief p.m. regime before starting to prepare the patients for a night of what we hoped would be a good rest. So it is with this month. Summer's work and convention have become the past, now we can catch our breath, give thanks, and plan the future winter activities.

"Guild President Bob Russell has given us an idea for such activity. In the August issue of the Journal he invited all chapters and members to prepare items for sale at the '1980 Flea Market', to be held at the Philadelphia national convention. Chapters can make this a fund-raising project and members at large can earn extra spending money. It sounds very exciting and I personally am going to do my holiday shopping early.

"This week I received a letter from Sandra Parsons, our new managing editor of the Journal, stating she was having to change the deadline for our column to 45 days prior to publication. A directive from the Guild Board requested Sandra to mail The Journal one week prior to publication date. Example: items submitted to the January issue should reach Luellyn no later than November 1st so she can edit and send her material to the home office by December 15th. Hopefully, I will be able to give you a report of the convention planning session in the December issue.

"As most of you know, we were saddened by the death of Sam Pearlman, WRVP, in August. We will all miss him and we certainly extend our heartfelt sympathy to his wife, Louise.

"Until next month — I wish all of you a BIG Thanksgiving feast, and hope all the witches and goblins found a great welcome treat at your door." — Jewell

Our newest member of the Auxiliary Board, and membership chairman, Julie Berry, joins us for her monthly chat: "As the newest member of your Auxiliary Board, I have probably had the most to learn since I took office in July. I am really surprised by the amount of work that is carried on between conventions; practically every week I hear from one member or another. Details for the Philadelphia convention are already coming into focus even though other people are still finishing up projects related to the Minneapolis convention. We are hoping to see new auxiliary chapters organize and receive charters in Syracuse, Montreal, Altoona, Columbus, and Champaign. We are working to get some more members from the state of Nebraska, (at the time of this writing we have one). In addition, as your membership chairman, I would like to be in touch with all the local chapter officers so we can work together to dignify, enlarge and strengthen our organization throughout the countries, throughout the year.

"I am here to serve you as your first vice-president and membership chairman. Please keep in touch, let me know if you have ideas to share or problems to solve. If you are not presently a member of the Piano Technicians Guild Auxiliary or if you know someone who would like to join, please drop me a line at 6520 Parker Lane, Indianapolis, IN 46220. Have a Happy Thanksgiving!

"With warm regards, Julie (Julie Berry, First Vice-President and Membership Chairman)".

Bert Sierota, our efficient recording secretary, has forwarded Auxiliary chapter officer changes for publication. We are happy to recognize these members who are willing to assume responsibility for local happenings, and wish for them successful and fruitful terms of office.

NORTHEAST REGION:

Reading-Lancaster: Celia Bittinger, president; Kathryn Snyder, vice president; Pearl Kreitz, secretary.

South Central Pennsylvania: Rosanna W. Hess, president; Ruth Loucks, vice president; Shirley Truax, secretary; Sue Hoffheins, treasurer; Dorothy E. Truax, historian.

Philadelphia: Shirlie Felton, president; Bert Sierota, vice president; Pat Johnson, secretary-treasurer.

SOUTHEAST REGION:

Richmond, Virginia: Helen Doerflein, president; Lillian Tobias, vice president; Mabel Hiatt, secretary; Elizabeth Batts, treasurer.

Daytona Beach, Florida: Helen Pearson, president; Louise Gaudette, secretary.

CENTRAL EAST REGION:

Cleveland: Eleanor Metz, president; Ingrid Gotrich, vice president; Ginny Russell, secretary-treasurer.

Indianapolis: Julie Berry, president; Carol Reeder, vice president; Cheryl Rice, secretary-treasurer.

CENTRAL WEST REGION:

Hutchinson, Kansas: Betty Graber, president; Louise Tinkler, secretary.

Wichita, Kansas: Dessie Cheatham, president; Catharine Moore, vice president; Norma Reimer, secretary; Ethel Novinski, treasurer.

Twin Cities: Virginia Seller, president; Maxine Buckman, vice president; Helen Desens, secretary; Beatrice Kurk, treasurer.

Minnesota-North Iowa: Phyllis Cady, president.

WESTERN REGION:

Los Angeles: Marjorie S. Evans, president; Thelma Berg, first vice president; Bernice Chinn, second vice president; Ivagene Dege, secretary; Pauline Miller, treasurer; Sarah Lampiasi, parliamentarian; Dorothy Odenheimer, historian.

Following is a short review of chapter 18 from Arthur Loesser's book, *Men, Women and Pianos*. The chapter is titled "The Piano As A Female Accomplishment".

He begins by observing that he thinks "the history of the pianoforte and the history of the social status of women can be interpreted in terms of one another." After a few more introductory remarks about the necessity for a gentleman of status to keep his wife and daughters in idleness as a matter of prestige, causing them to waste time and money in a way which was respectably showy, he moved on to quote from novels representing English social life of the late eighteenth and nineteenth centuries. It was, he observes, more ladylike to be caught idling while doing something "uselessly pretty" — such as needlework, framing pictures in shellwork, crapework, chenille work, ribbon work, water work and the like.

All of these activities were considered as "accomplishments," and the one which ranked at the top of the scale was music. It was the favorite because it showed off best while actually being accomplished. This reduced the activity basically to the piano, although the guitar and the harp occasonally rivaled the keyboard. Mr. Loesser doubts that these feminine activities were actually enjoyed by families indulging in them. Still, they were in great demand. An "accomplished" female was considered a better prize in the marriage market. (He refers to it as a gamble, although that word seems to this writer to refer more to present-day marriage.) Singing and piano playing were not only an amorous lure, they were assurance of her family's gentility. *"A possible candidate for a young lady's hand was expected to feel pleased to ally himself with a family of such refinement that its daughter had learned how to make a needlework picture of Solomon and the Queen of Sheba, paint roses on china buttons, and sing 'Auld Robin Gray' to her own accompaniment."*

The novel on which he relies heavily is *Pride and Prejudice* by Jane Austen. Written in 1797 when Miss Austen was 22 years old, it reflects current attitudes toward music and toward the pianoforte in particular. Miss Austen herself appears to have had a general disdain for the subject, and for those who indulged in it. Yet she herself, upon acquiring nieces and nephews, planned to play for their entertainment when they visited, and kept up her own practice quite diligently. The incidents which she describes in her novels appear to describe quite accurately "the vanities of the denizens of the petty, well-bred, semi-rural world in which she lives."

One of the families of which she writes, the Bennets, lived 24 miles from London. Mr. Bennet enjoyed an estate (unearned income) of 2000 pounds a year. This was not a great amount on which to support five daughters with any elegance. His wife had a little fortune of 4000 pounds, but she had certain "low connections" regarded as detrimental to opportunities of advantageous marriages for her daughters. While they were attending a party at the home of a man who had made a fortune "in trade," the following scene is described by the author, Jane Austen.

"The daughter Charlotte speaks to Eliza, the second of the Bennet girls: 'I am going to open the instrument, Eliza, and you know what follows.'" The author uses the word "instrument" as synonymous with pianoforte. Eliza answers: *"You are a very strange creature by way of a friend! — always wanting me to play and sing before anybody and everybody! If my vanity had taken a musical turn, you would have been invaluable; but as it is, I would really rather not sit down before those who must be in the habit of hearing the very best performers."* On Miss Lucas' persevering, however, she added, "Very well; if it must be so, it must."

As Eliza is the heroine of the story, this show of modesty is intended to be an admirable attribute. As the story continues, she sings and accompanies herself, an effort described as "pleasing, though by no means capital." After a couple of songs, she is eagerly succeeded by her sister Mary. Mary is what would be described in today's parlance as a "Plain Jane." Therefore, in an effort to become more pleasing she has applied herself to the practice of the pianoforte with a tremendous amount of zeal. Miss Austen gives her neither genius nor taste, and endows her with a pedantic air and conceited manner. In her effort to attract attention, she plays a concerto, and only at the very end manages to "purchase praise and gratitude by Scotch and Irish airs, at the request of her younger sisters." As Mr. Loesser says, "Poor Mary." No author of that period would have wasted sympathy upon her type, because the reader, especially the feminine one, would not have identified with her at all. A little music, performed not too well, is an ornament to a pretty girl but the ugly one could not hope to escape her tribulation by using the pianoforte. Later, the author mockingly informs us that "Mary is studying thorough bass."

Of all the other characters described, the "ridiculous toady," the rich, rude patroness, the novel's hero who is disgusted at such a means of passing the evening to the exclusion of all conversation, Mother Bennet's low connections consisting of a country lawyer and a brother actually "in trade," Miss Austen conveys her attitude of contempt for their vanities, while at the same time derogating the very activities they indulge in.

William M. Thackeray's *Vanity Fair*, published during 1846-48, is another of the novels Mr. Loesser uses as a source. The story covers events relating from 1815, when Mr. Thackeray would have been an infant. He seems to have learned a great deal about the era, however, and is not found guilty of any "serious anachronisms." The story is concerned with cruelties inflicted upon each other by English people preoccupied with money and gentility. Thackeray uses the phrase "cruelly genteel" at one point. Again music is portrayed as a trivial pastime. Only once, when the action

shifts to a small German principality, does he represent music as a fine art with descriptions of Don Giovanni and Fidelio.

As for the rest, set in England, he further conveys the low image of music there by making one of the two principal female characters, Becky Sharp, a quite proficient pianist, but endowing her with other qualities not so enviable, among them half-French descent, disreputable artist parents, and green eyes! By contrast, the other heroine, Amelia Sedley, is softhearted, loyal and stupid. She, too, plays the piano, but not too well, lest she compromise her heroinity.

As the story progresses, we witness the bankruptcy of Amelia's father and his loss of "gentility," the desertion of her fiance to a rich, therefore more desirable female (who also plays and sings — but not too well) as well as other cruelties which are all known to this day. The central fact for us, however, seems to be the existence of music, the trivial "accomplishment," requiring the use of the pianoforte.

What did all this "accomplish"? One conclusion made by Mr. Loesser appears to be feasibly acceptable. *"For the unconcerned young lady of Lonbourn to play accompaniments to her own singing of Scotch airs, pleasingly but not capitally — or, Aunt Jane Austen to play country dances so that the young people could dance — for well-bred girls to learn a little music and give it up after marriage — for a blustering, vulgar tallow-merchant-turned-banker to have a huge article of carved and leather-covered house equipment so that his daughters could bang out 'The Battle of Prague' — it was for all this, then — while Napoleon was coddling his carcinoma, while Beethoven was meditating his final sonatas — that the Stodart, the Clementi, and the Broadwood factories were chugging forth their two, their three, their five pianos a day."*

What DOES all this have to say about the social status of women? As the ad says, "You've come a long way. Baby."

Ring the Bell

Everyone wants a chance to receive the prestigious President's Club award or to sport a Bell Ringers or a Restorers Club ribbon at the annual convention. To insure that every Bell Ringer point is credited to your "account," and that every Restorer of a former member is recognized, the Membership Department requests the following:

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

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

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

4. If corrections should be needed in the records, please notify the Home Office promptly, 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.

Sponsor a new member and win points in the Bell Ringers Club. Join the celebration at the 1980 convention in Philadelphia.

Bell Ringers Club	Points
BACH, Philip	3
BALIGIAN, Agnooni	6
BERRY, Ronald	5
BITTINGER, Dick	4
CLARK, Peter M.	1
CLOPTON, John	4
COX, Merril	1
CROY, Ronald	12
ERBSMEHL, Charles	1
GOETSCH, Lawrence	12
HARRIS, Vaughn	6
HART, W. D.	6
HEINDSELMAN, Lois	6
HESS, James	9
HOHF, Robert	6
JOHNS, Barney	1
KOFORD, Lyn	5
MARTIN, Barbara	1
MEEHAN, Joseph	3
MEHAFFEY, Francis	6
PETERS, George	12
PHILLIPS, Webb	5
RILEY, Martha	1
SELLER, Marion	10
SERVISS, Kenneth	6
SEVERANCE, David	7
STONE, Sid	6
TAYLOR, Kendal	4
WHITTING, Ted	6
WICKSELL, Carl	1
WIGENT, Don	6
WILLIS, Aubrey	1
WINTERS, Kenneth	4
WOOD, Edwin	5

New Members/Reclassifications

REGISTERED TECHNICIAN

BRAVO de RUEDA, REYNALDO F.
3402 N. McCallum, Box 8
Denison, TX 75020
South Texas Chapter

DELPIT, JOHN A.
P.O. Box 84
Whitewater, CO 81527
Member at Large

FANGER, ROSE RITA
N. 3215 Madison
Spokane, WA 99205
Eastern Washington Chapter

McGLOTHLEN, KENNETH H.
315 Maple
Clarkston, WA 99403
Eastern Washington Chapter

PITTS, FLOYD D.
709 Sang
Fayetteville, AK 72701
Northwest Arkansas Chapter

SILVA, JOSEPH
3660 Boulder Hwy
Las Vegas, NV 89121
Las Vegas Chapter

SKINNER, RANDY A.
3402 N. McCullum
Denison, TX 75020
South Texas Chapter

WINTSCH, WALTER F., JR.
Rt. 2 Box 5
Snowhill, NC 28580
Pamilco Chapter

APPRENTICE

BREMMER, WILLIAM
5858 Anthony Pl. #211
Monona, WI 53716
Madison Chapter

BUTLER, ALFRED K.
17 Cononchet Trail
East Greenwich, RI 02818
Rhode Island Chapter

GAGNE, RODOLPHE J.
706 W. Liberty St.
Rome, NY 13440
Syracuse Chapter

KRAUSER, LARRY A.
5139 N. College
Indianapolis, IN 46205
Indianapolis Chapter

SPRAGUE, KEN
Birchdale, Via
Johnson's Landing, Canada V0G 1M0
Eastern Washington Chapter

ALLIED TRADESMAN

TREFZ, EDWIN C.
202 East South Ave.
Norwood, PA 19074
Philadelphia Chapter

SPURLOCK, BILL A.
1366 Cantelow Road
Vacaville, CA 95688
Sacramento Valley Chapter

ASSOCIATE

FRANK, RICHARD G.
337 Forest Ave.
Portland, ME 04101
Maine Chapter

STUDENT

BUTLER, KARIN A.
17 Conochet Trail
East Greenwich, RI 02818
Rhode Island Chapter

CASE, DAVID S.
1654 Dustan Loop #21
Clarkston, WA 99043
Eastern Washington Chapter

GRANT, ALAN R.
3545 Edison Ave. #22
Sacramento, CA 95821
Sacramento Valley Chapter

HAYDUK, GEORGE
P.O. Box 785
Muncie, IN 47305
Indianapolis Chapter

McBRIDE, DEBORAH L.
10911½ Wellworth Ave.
Los Angeles, CA 90024
Los Angeles Chapter

SCIOLINO, THOMAS
88 Vernon Place
New York, NY 14214
Buffalo Chapter

VETHE, DONALD J.
613 Prairie Ave.
P.O. Box 25
Baraboo, WI 53913
Madison Chapter

RECLASSIFICATIONS

REGISTERED TECHNICIAN

BILLERA, JOHN
Long Island-Nassau Chapter

ECCARDT, ROBERT W.
New York City Chapter

FARLEY, MERRI P.
Northeast Florida Chapter

FINLEY, JOHN D.
Santa Barbara Chapter

MATTHEWS, KEVIN P.
New York City Chapter

PELICK, JOHN JR.
Northeast Florida Chapter

PUZZO, SEBASTIAN P.
Connecticut Chapter

TEMPLE, RICK D.
Twin Cities Chapter

OBITUARIES

Paul Cheatham
Wichita and Hutchinson Chapters

Clarence E. Sturgeon
Pittsburgh Chapter

Frank Myers
San Francisco Chapter

Bernard J. Kester
Capitol Area Chapter

John J. Lamar
Twin Cities Chapter

Classified Advertising

CLASSIFIED ADVERTISING RATES are 15 cents per word with a $3.00 minimum. Full payment should accompany insertion request. Closing date for ads is the first of the month prior to publication.

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

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

HELP WANTED

THE KIMBALL PIANO & ORGAN COMPANY is expanding their service facilities and is now accepting resumes from technical applicants. Applicants interested in relocating to Southern Indiana who feel they have the qualifications for all types of piano work should send this information to the attention of **Roger Weisensteiner at Kimball Piano & Organ Co., P.O. Box 432, French Lick IN 47432**

TIRED OF THE COLD? Tuner needed in warm Houston, Texas. Excellent arrangements. $22,000 per year. Call **Freeman, (713) 683-9221.**

TUNER-TECHNICIAN WANTED—Join El Paso's leading keyboard dealer. 40-hour week for income in excess of $12,000. Contact **Phil Davidson, Sr., 4531 Montana Avenue, El Paso, TX 79903. Phone (915) 566-9343**

WANTED—Fulltime piano tuner-technician. Salary approximately $12,000. Contact **Dean William Kurzban, The Cleveland Institute of Music, 11021 East Boulevard, Cleveland, OH 44106**

WANTED

WANTED TO BUY—Advertising book issued in 1923, by American Piano Co., "The Piano Knabe Beautiful," 12"×16" bound in maroon leatherette. I will pay your price for this book. **Brady, 4609 Crankbook, Indianapolis IN 46250. (317) 259-4305. After 5 p.m. call (317) 849-1469**

ANTIQUE PIANOS WANTED — Grands, squares, uprights. Any condition. Top prices. Finder's fee. Write or call **Edward E. Swenson, 11 Congress St., Trumansburg NY 14886. (607) 387-6650**

WANTED—Sight-O-Tuner. Also Oslund Key Machine. **Vern Stromberg, Box 9304, Wyoming, MI 48509. (616) 452-3068 or (414) 871-0857**

WANTED TO BUY — Mason & Hamlin Grand Piano. Want one that was a player. I have a player mechanism to install. Will pay handsome reward. **Brady, 4609 Crankbrook, Indianapolis IN 46250. (317) 259-4305, after 5 p.m. (317) 849-1469**

POSITION DESIRED

POSITION DESIRED: Piano technician moving to Mesa - Tempe - Phoenix - Scottsdale area, desires fulltime position with store, shop or school. Contact: **Vincent Mrykalo, RTT, 276 South 900 West, Provo UT 84601. Phone: (801) 375-1582**

FOR SALE

KEY RECOVERING MACHINE—Build your own precision key recovering machine from stock machine parts. Demonstrated 1978 California convention and Pacific Northwest 1979. Send $10.00 p.p. for acccurate machine drawing instructions, photos, to: **Solenberger Piano Service, 1551 Lynn Court, Santa Rosa CA 95405**

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

FOR SALE—Successful fulltime piano service business in Denver, Colorado. Involves service of primarily Steinway & Sons Pianos and concert work as well. Excellent opportunity for good tuner-technician to relocate in one of America's most desirable cities. Send inquiries to **Professional Services, 57 Grant Street, Denver, CO 80203**

FOR SALE—5'8" Weber grand with Duo Art Player, Serial No. 38918. Needs rebuilding. Finish in good condition. Player mechanism complete except for motor box. $2,000. Contact: **R. Schatzel, 4 Skiffes Creek Landing Road, Newport News, VA 23603. (804) 887-5679**

FOR SALE—Piano Service business; established 16 years in sunny Phoenix, Arizona. Price $10,000 cash. Approximately 1,500 accounts plus constant referrals, plus repairs. Earn three-times asking price first year. Also, house available with three bedrooms, large swimming pool, large refrigerated shop area, plus storage building located in beautiful Scottsdale. Asking $70,000. Write: **Tuner, Box 1323, Scottsdale, AZ 85251**

FOR SALE—Chickering Ampico Player A Drawer, semi-art case distressed walnut. Rebuilt, $7,900 or make offer. **(714) 544-1725 or Sheridan's Piano Service, 14172 Del Amo, Tustin, CA 92680**

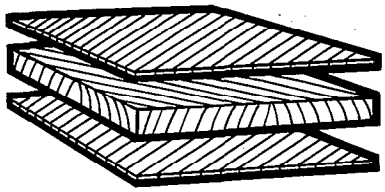
MISCELLANEOUS

CASH PAID for used Steinway action parts; Chickering and Mason & Hamlin screw stringer parts. Send sample of discards for payment estimate to **Janson Piano Co., 299 Queen St. W. Room 200, Toronto, Ontario, Canada M5V 1Z9**

TUNERDATA: (1) Mail reminders make money for you; (2) geographical files make money for you; (3) we'll do them both for you. Write **Ed Fesler, 11315 Rich Circle, Minneapolis MN 55437**

SENSATIONAL all new Viennese Fortepiano Kit project by Philip Belt, America's most experienced maker of early piano replicas. Write for free input brochure, **26 Stanton St., Pawcatuck, CT 06379**

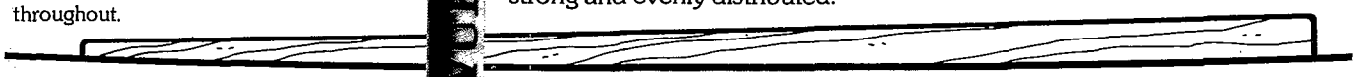
Pencil point proves performance of new Wurlitzer Soundboard



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.

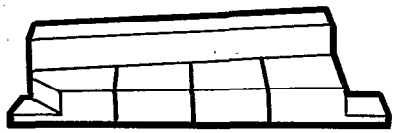


That is because Wurlitzer now uses three separate layers of mountain-grown spruce in all of its finer pianos. These layers are placed at scientific angles so they transmit string vibrations (which travel mostly with the grain) to all corners of the board. The result is more volume, richer tone, and greater 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.

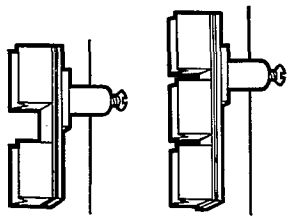
Of still greater interest to technicians, this new soundboard is more stable, with a coefficient of expansion/contraction that is 80% lower than that of solid spruce. This means truer tuning and fewer problems caused by moisture or temperature variations.

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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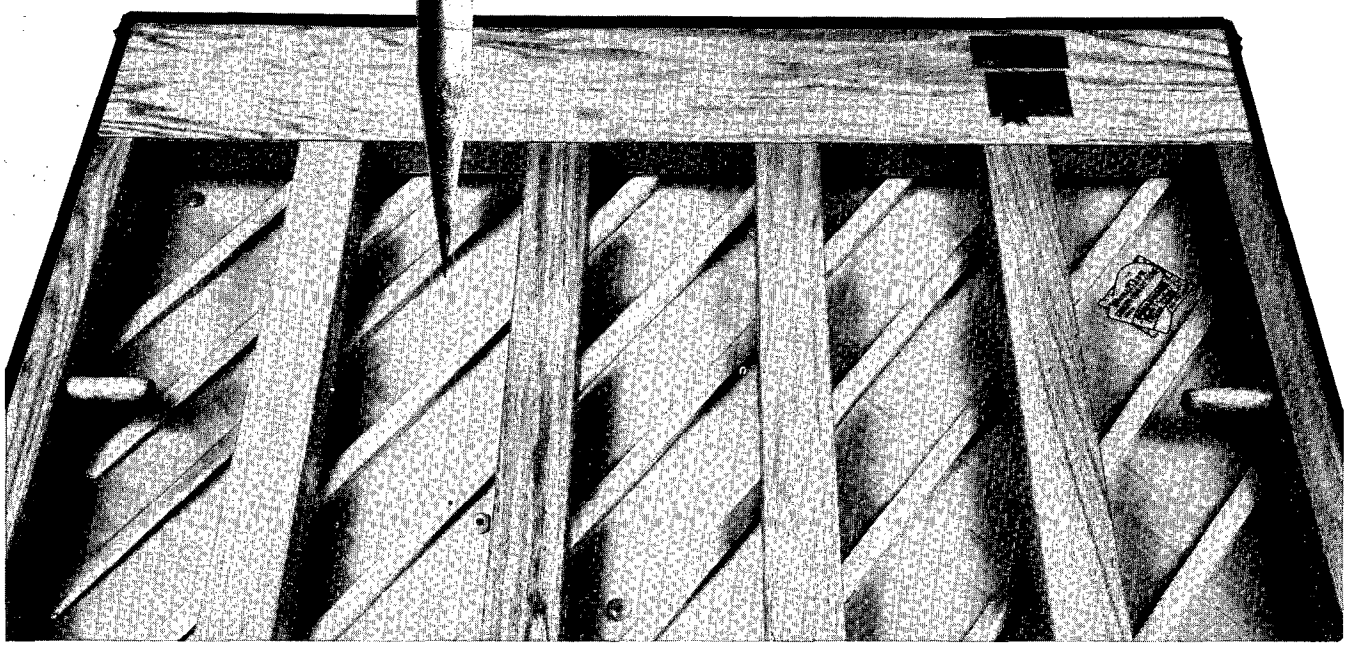

PIANO TECHNICIANS GUILD

NOVEMEBER 1979 UPDATE

Paul Cheatham Dies

On Wednesday, October 3rd, I received the sad news that Paul Cheatham was killed in an auto accident. Saturday, Lu and I and several members of the Wichita Chapter and their wives attended his memorial services in McPherson, Kansas. His standing in the community was substantiated by the floral offerings and the local people in attendance.

After the services, many of us visited Dessie in the hospital. She survived the crash with many stitches in the head, bumps, bruises and abrasions to her arms, shoulders and ribs. I'm sure other sore places will develop for the next few days, but I'm equally sure she will be OK in a little while.

Paul and Dessie met and fell in love when they were in the first grade. They were married shortly after high school graduation. That love will continue forever, for neither accident nor death can prevent it.

Paul served as Central West Regional Vice President from 1971 to 1975, and though we did not always see eye to eye on issues, I think he served with distinction and pride. He always made decisions as to what he thought best for the Guild. He was the sort of man who could disagree with you without being disagreeable. His technical knowledge was abundant and it was yours for the asking. He was a good businesman, and gave many classes, both locally and on the national level, on technical and business procedures.

We will all miss him and will long remember him. If I could make a wish today, it would be that I could be half the man that Paul Cheatham was.

-- Ernie Preuitt, Central West Regional Vice President

Chapter Mailings

In the future, mailings to all the chapter presidents will be mailed by the Home Office on the seventh (7th) of each month.

As material is received for chapter distribution, the Home Office will include it in the next regular chapter mailing.

In cases of urgency when the sender is unable to meet the deadline and makes a special request, the Home Office will distribute chapter mailings immediately upon receipt.

A list of items contained in each chapter mailing will be printed in the next UPDATE so that all members will know the subject matter of the information which has been mailed to the presidents. Members are urged to ask that the information be read at a chapter meeting or passed to each member as quickly as possible. Chapters are urged to include a review of the information in their chapter newsletters.

Chapter mailings are important to the operation of the Guild, and costly to produce and distribute. WE HOPE THIS METHOD WILL HELP EVERYONE KEEP INFORMED ON GUILD BUSINESS.

Chapter Notes

...THE SYRACUSE CHAPTER has a technical note for you from the world series time: When the world series approaches, it is well to think of good after-touch on a piano which can be likened to the baseball power hitter's full swing. Lack of after-touch is like a power hitter's bunt swing. The ball or the piano key travel only a short distance without them...

...CHUCK BURBACH of Wichita, Kansas, reports that pianist Peter Nero was in his town recently and that during a break between sets, he addressed his audience with this paraphrased remark: "My performance this evening would not have been possible without the excellence maintenance and tuning of the piano by the piano technician! Says Chuck, "In my 30 years of tuning, this is my first experience of hearing a major artist give public credit to the 'lowly tuner,' upon whom their livelihood depends, as we all know. So, fellow tuners, whenever or wherever you are working for Nero, give him everything you've got!'..

...THE INDIANAPOLIS CHAPTER featured a short promotion in its newsletter about a special "store" available to its members -- "There is a place where fewer than 20 people in the whole city of Indianapolis are allowed to shop. The prices are good at this place because it is only in business to help its customers; the organization is nonprofit. The items it sells have been carefully researched and market-tested. You can buy everything from rubber stamps to gold seals to fancy pins that you'll wear with pride. You can pick up little preprinted and already composed pamphlets which tell your customers how good you are because you are a PTG Registered Technician. You can profit from the experience of fellow tuners across the country who have helped the home office decide what kinds of materials will help you the most. If you haven't checked out what kinds of things the Guild has for sale, you maybe should."...

...1979 CONVENTION HOST CHAPTER -- TWIN CITIES -- reports that their popular coasters are being reordered. Although being a coaster is the primary function of the pliable round things, the chapter has a few plans for the future: they can serve as butter molds, Jello molds, letter sealers, ant houses, piano casters, teething rings initial plaques for those people with the intials P.T.G.

...THE SAN FRANCISCO CHAPTER is compiling a chapter specialty services directory. It will list members who offer particular skills or services to the trade, such as key covering, bushing, stringing, etc...

...THE MEMPHIS TENNESSEE CHAPTER visited the Baldwin factory in September, located in Conway, Arkansas...

...FORD PIANO SUPPLY COMPANY has a new address. Address their mail to John P. Ford, President, 511 West 33rd Street, New York NY 10001. The new telephone is (212) 564-8988. ...

WHERE ELSE COULD YOU COME FEELING SO SMART, LEAVE FEELING SO DUMB, AND FEEL GREAT ABOUT IT?

Here we are at another PTG convention,
One more year and another sensation.

And what does PTG mean to me?
Well, come along and you will see!

"P" is for the partnership
We have with one another,
The respect and the guidance
We get from each other.

"T" is for terrific --
That's all of you present
For sharing your successes and failures
With no hesitance.

"G" is for gratitude,
And that's what I feel,
For having the privilege
Of being a member -- I'm sure you'll agree --
Is one heck of a deal!

So may I close
With a great deal of glee,
I'm proud as the dickens to say
I'm one of the members
Of a great bunch of people
Collectively known as the PTG!

-- Brian S. De Tar (written at the California State Convention in Los Angeles, February 1979.)

New Billing Procedures

In accordance with the July 1979 Council action, a new procedure will begin with the 1980 billings to be mailed to all Registered Technicians, Apprentices and Allied Tradesmen.

1. CHAPTER DUES collected by the Home Office must be paid in one annual sum with the January dues payment. There will be no partial payment for chapter dues. Chapter dues collected will be refunded to the chapters at the end of the first quarter of the year.

2. PARTIAL PAYMENTS - The old quarterly partial payment system has been cancelled by Council order, and in 1980 dues must be paid within the three-part system, due January 1, April 1 and June 1. This new system will ensure that member dues are fully paid before the end of the year.

Annual dues are $84. The three-part payment plan is $28 each payment, plus a $3 partial payment fee on the second and third payments ($84 plus $6).

3. DELINQUENT DUES - In accordance with the Guild Bylaws, dues are delinquent 30 days after payment is due. A deliquent dues notice with a second billing will be mailed to all members whose dues are not paid and the chapter and Regional Vice Presidents will be notified. If dues are paid within the next 30 days, the member will retain membership in the Guild.

4. DROPPED MEMBERSHIP - If the Home Office receives no response from a member whose dues are delinquent, the member will be dropped. Notice will be mailed to the member and the chapter and Regional Vice Presidents will be notified.

5. INSURANCE - Guild insurance is automatically cancelled when a member is dropped and not reinstated until the member's full membership benefits are reinstated.

6. REINSTATEMENT - In accordance with the Guild Bylaws, a $30 reinstatement fee will be assessed for each reinstatement to cover expenses of handling the drop and reinstatement procedures.

Approval by the chapter is required for a reinstatement and the chapter may require that an examination be taken before approval is granted.

DUES PAYMENT DUE	DELINQUENT DATE	DROPPED
January 1	March 31	May 7
April 1	May 31	July 7
June 1	July 31	Sept. 7

Insurance Notes

DON'T FORGET -- IF YOUR MEMBERSHIP DROPS, YOUR INSURANCE THROUGH THE GUILD AUTOMATICALLY DROPS, TOO. DON'T LET THIS HAPPEN TO YOU.

ARE YOU KEEPING THE HOME OFFICE UP TO DATE ON YOUR INSURANCE BENEFICIARY? WE LOVE TO HEAR ABOUT WEDDINGS, SO IF YOU HAVE SOMEONE YOU WISH TO BE LISTED AS A BENEFICIARY ON YOUR INSURANCE, KEEP US INFORMED.

CLARENCE STURGEON

WE HAVE RECEIVED A COPY OF A NEWSPAPER OBITUARY FOR ANOTHER OF OUR MEMBERS. BELOW APPEARS A PORTION OF THE CLIPPING.

Clarence Sturgeon died unexpectedly on Sunday, Oct. 7, 1979. A life-long resident of Apollo (Pensylvania), he was known through the Kiski Valley as a musician who specialized on the violin and saxophone. He was a music educator, band leader, performer and piano technician. He was at one time a vaudeville performer who played 14 various instruments as part of his act. During the 1920's, he was director of the Hyde Park Bank and during a period of some 36 years taught music in various Kiski Valley schools.

He had been a piano tuner and technician from 1925 until the present and was widely known throughout the profession. He was a member of the Piano Technicians Guild, having at one time been president of its Pittsburgh Chapter, and was a Sustaining Life Member of the organization.

1980 FLEA MARKET

Next year at the Philadelphia National Convention, we are going to offer a chance for all chapters and their auxiliaries to personally be a part of the convention and return home with money for their treasuries. This is the first time this chance has ever been offered to you.

Here are some guidelines in order to get you started on your way to more money:

1. Make, obtain, buy or create a product you think people will buy.

2. Hopefully, this will be a chapter project that everyone will contribute to for the entire year.

3. Each chapter will be responsible for the making, transportation and selling of their product.

4. The night of the Flea Market, you will be given free tables among the carnival-like "block party" where you will sell your wares.

5. You have complete control over prices, and all the profit is yours.

6. In order that we have an idea as to how many tables will be needed, the chapters will have to inform the Home Office if they are going to participate in this fun night, before April 1, 1980.

I believe this Flea Market and Block Party, with its bright and fun-filled carnival atmosphere, will be a fun event at the convention. But more than that, it will promote togetherness for all chapters during the year. (And I'm sure all chapter could use money!)

The goal is for all chapters to participate, have fun, and see a financial gain.

Sincerely,

Bob Russell

-- Bob Russell, President

Letters... We get letters.

Mr. Don Santy,
Executive Editor
Seattle, Washington

Congratulations to you and Jack Krefting. The two of you are doing a great job. PTG is moving on again.

Your August editorial is superb. The life of the past and present of a piano technician could not have been told better. With 60 years of experience and 33 years as a member of our organization, I should be able to judge.

Please convey my thanks to the Executive Board and the Man of Note Committee for selecting me for the 1979 "Man of Note" in my retirement.

See you all in Philadelphia.

-- Erwin Otto

CHAPTER MAILING INFORMATION

The most recent mailing to chapter presidents contained:

1. A notice explaining chapter mailing procedures and deadlines.

2. Bob Russell's Flea Market letter contained in this UPDATE.

3. A letter from the Government Affairs Committee asking each chapter to appoint a special committee con government regulations affecting membership.

4. Latest printing of the Guild's Serviceability and Suppliers Form.

5. Request for Seminar Approval form.