Piano Technicians
# Journal
September 1988


## Views Of The Profession And The Industry:
## The Guild's 31st Annual Convention And Institute
## And NAMM's Summer Expo

# The Baldwin Piano...
# *You can see why it sounds better*

The precise setting of downbearing is extremely important to piano tone. Too much bearing inhibits tone because the soundboard cannot vibrate freely, while too little bearing does not provide good sound transmission. From our research we have developed a unique method of setting downbearing with a degree of accuracy previously considered impossible.

GRAND PLATE MOUNTING SYSTEM: Each mounting hole around the perimeter of the plate is threaded to accept a hardened steel bolt. This allows the plate to be set at the optimum height for bearing on the front side of the bridge (U.S. Pat. No. 3,437,000).

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ACU-JUST™ HITCH PIN: Because this pin is installed vertically instead of at an angle, it is possible to raise or lower each string individually for ideal bearing on the back side of the bridge (U.S. Pat No. 3,478,635).

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There are important advantages for the technician, too. If major soundboard or bridge work is ever needed, it is possible to remove the plate, pinblock, strings and tuning pins as a unit. Simply lower the tension, remove plate bolts and dampers, and hoist it out. Tiny adjustments in bearing can be made without unstringing the piano or even lowering the tension. Since such adjustments are not normally necessary in the field, they should only be made after consulting Baldwin Technical Service in Cincinnati. When re-stringing a section or an entire piano, contact Baldwin for the loan of special bearing-setting equipment.

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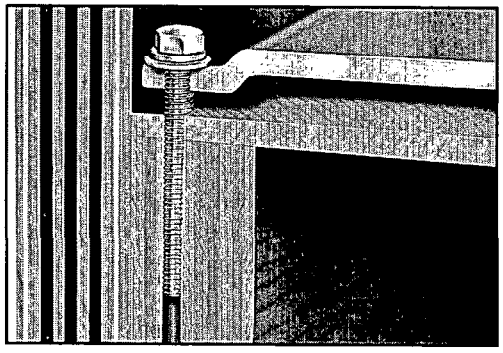

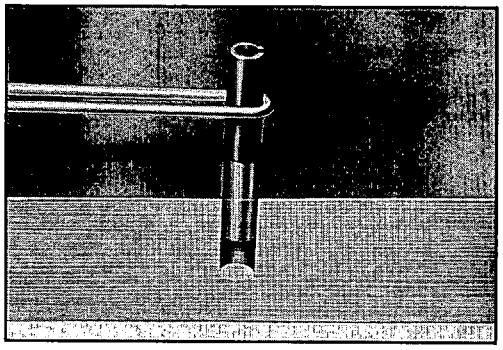

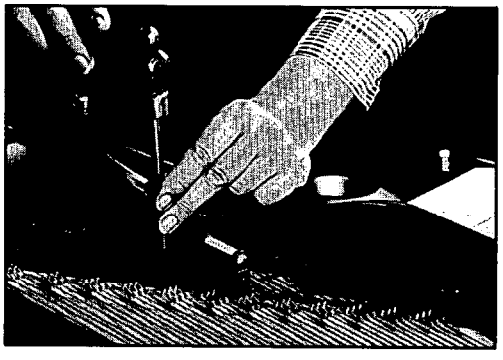

Second in a series of informative ads on piano tone published by Baldwin Piano & Organ Company exclusively for the benefit of piano technicians.

**Baldwin.** - *Leading the way through research*

**The Piano Technicians Journal** **September 1988**

*Official Publication Of The Piano Technicians Guild, Inc.*

*Volume 31*
*Number 9*


# In This Issue...



## Plus...



## The Cover...

*The summer NAMM show is full of sights (and sounds) as shown in this multiple exposure.*




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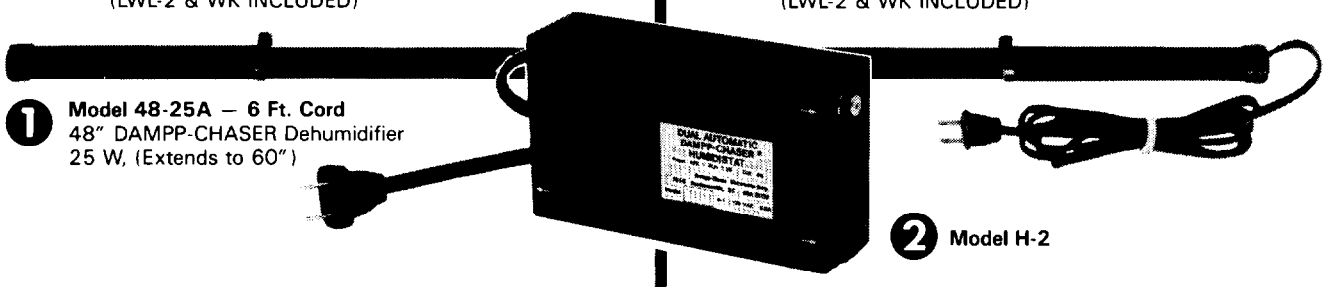
3. GHM-1 3-PART HUMIDIFIER KIT (LWL-2 & WK INCLUDED)



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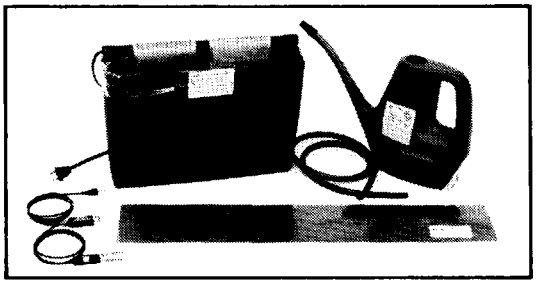
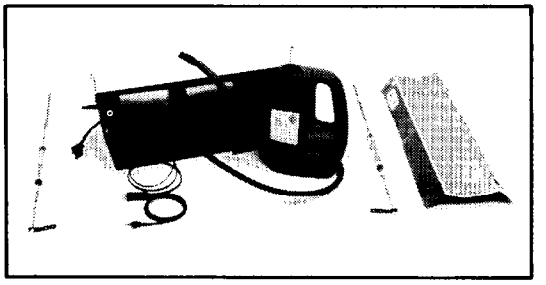


**3** **Model HM-2**



**Model GHM-1** **3**

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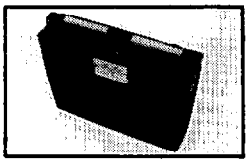
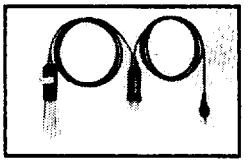
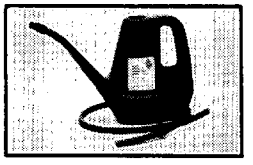
**5 YEAR GUARANTEE**



**Model HM-1ST**
Vertical Humidifier Bucket



**Model LWL-2**
Vertical & Grand Low Warning Light



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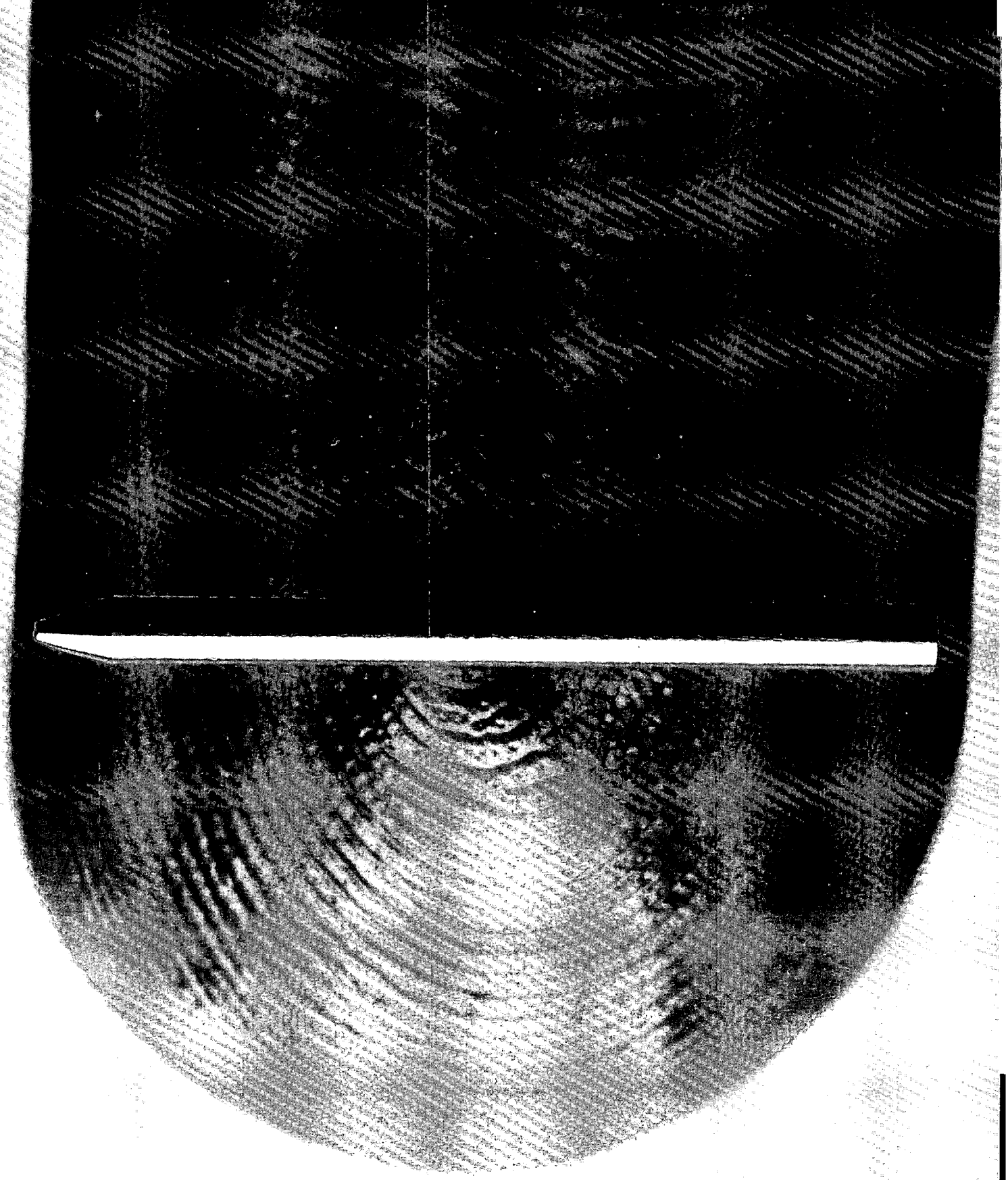

# At Young Chang, there's nothing too small to improve.

No one notices a center pin until there's a problem.

Most manufacturers make them out of brass. Eventually they tarnish, and can cause verdigris to form. But it usually happens after the piano has left the sales floor. And often after the warranty has expired.

At Young Chang, we make our center pins of non-oxidizing German silver. They don't tarnish. So they move freely for the life of the piano. Chances are you'll rarely need to repin or ream the bushings of a Young Chang action. And chances are our efforts will go completely unnoticed.

You also may not notice we coat many of our action parts with Emralon™ to reduce friction and noise and eliminate graphite penetration in felt and buckskin.

Or that we're using an improved premium English hammer felt that lasts longer and produces a bigger sound. Or that there's now whippen auxilliary springs on our 7′ and 9′ grands for finer touch adjustments.

Or that we've strengthened our grand keystop rails to prevent damage during moving, and steel-reinforced our grand keyslips to minimize warping due to changes in the weather.

We've also developed a moisture absorbent finish for our black keys and a new satin case finish to bring out more of the natural wood grain highlights.

While these recent improvements have gone largely unnoticed, our 12 year *full* warranty is getting all kinds of attention. It's the kind of promise people understand. And the kind of promise no other manufacturer is prepared to offer.

Little by little, we keep refining our pianos. Because it's the little things that make the difference between a good instrument and an extraordinary one.

For more technical information, please call Ed Whitting at (213) 926-3200. Or write to him at Young Chang Technical Services, 13336 Alondra Blvd., Cerritos, CA 90701 for a free copy of our Service Guide and Technical Specifications Manual.

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The best the world has to offer.

# President's Message

**Ronald L. Berry, RTT**
**President**

## *Priorities*

As your new president I want to share some of the things I see as a major focus for the coming year. I see two main problems to attack. The first is the administration of tests and the second is the need to upgrade the meaning of RTT to make more difference between RTT and Associate memberships.

Let's start with the tests. Since 1980 we have been upgrading our tests to make them more standardized. The tuning test was first, when the new version became official in 1981. Setting up a system to administer this test was a huge job because we require examiners to be certified, and we had to test and train all those RTTs to become examiners. Then things slowed to a more normal rate where we were mainly testing members to become RTTs, with a few tests for examiners along the way. Many chapters chose not to give tuning exams because of the effort involved and they relied on other chapters, seminars and conventions to get their people tested. But many chapters met the challenge to get equipment and to get people certified so they could administer their own exams.

Recently there has been much talk of AEBs (Area Examining Boards — AEB is the preferred term over Regional Test Centers because it is the people who comprise the AEB, not the test site itself. One AEB could administer several test sites.) While this arrangement is working well in California where population density is high, it looks like it is not necessary in other areas at this time. The Examinations and Test Standards Committee did a survey of Associate members who were having problems getting tested and was able to solve every case where there was a reasonable problem by working with the chapters that are giving tests now. While the idea of AEBs is good and may be helpful in some areas, we will not need to rush into them and can develop them more slowly and carefully. We also encourage all seminars to give tests if possible. When a technician must travel a great distance for a test he usually feels better if he can get a seminar out of the same trip.

The administration of the technical test is in a bit more disarray right now because of the recent acceptance of the new technical tests. Many chapters have simply put off giving tests because they have not studied either of the new tests. Getting chapters up and running on technical tests is a prime concern and we have a subcommittee of ETS to help with this. The goal is to get most chapters ready to give the test themselves. This committee will be sure that there are classes available at seminars and conventions on how to give the technical test. They will also encourage seminars to offer technical tests when possible.

Both the tuning and technical test subcommittees will be responsible for helping people find where exams are available. They will also work with chapters and AEBs to make them as available as possible and to make test schedules known. There is also an effort underway to simplify paper work and the flow of paper for all the exams.

Aside from continuing efforts to make one technical test that incorporates the best of both, I have asked the committee to quit "improving" the tests. We have gone through a period of constant change and it has only added to everyone's confusion. We need to leave these tests alone for a while and get the administration of them in order.

The other main concern I see is the need to emphasize the difference between Associate and RTT. The membership changes opened up the Associate category and confirmed their right to advertise membership. This has led to some backlash from RTTs who are concerned about Associate members advertising; there has even been talk of changing the membership structure again to further restrict non-RTTs. It seems to me that

*Continued on page 8*

# Tech Gazette

Yamaha Piano Service September, 1988

## For Your Information

Just in case we forgot to mention this little item of information, our toll-free telephone numbers for Piano Service and Piano Parts are now operational in *all* fifty states of the USA.

For Piano Service: **(800) 854-1569**
For Piano Parts: **(800) 521-9477**

Our offices are open from 8:30AM to 5:00PM Pacific Time.

## Personnel Profiles

GREG FRANK

In past issues of "Tech Gazette," we introduced you to our Technical Manager, the members of our Parts Department, and our Customer Service Representatives. In the coming months, we'll be talking about the people in Technical Service—the remaining members of our Piano Service team.

**Greg Frank,** Technical Service Representative, is undoubtedly one of the industry's leading specialists in finish and cabinet repair. If you have a "how to" question about a cosmetic repair, we're confident that Greg has the answer.

Greg, a native of the Midwest, began his career as a piano technician by purchasing old uprights and reconditioning them. Learning refinishing and rebuilding from a master craftsman, he operated a piano restoration business as a private technician until joining Yamaha in early 1985. Greg resides in Long Beach, California and enjoys collecting antiques.

## MIDI Corner

Continuing our "MIDI Dictionary":

AFTERTOUCH
Two types of MIDI messages that tell how strongly the keyboard is being pressed. This is not the "force" or "speed" with which you play a note (Initial Touch or Velocity), but rather how *hard* you press on the key *after* you have played the note—thus "Aftertouch." Polyphonic Aftertouch indicates which key is being pressed and how strongly. Channel Aftertouch indicates the strongest pressure on any part of the keyboard. What a device will do with Aftertouch messages will depend on its function memory settings. NOTE: "Aftertouch" as a MIDI message is not to be confused with "Aftertouch" as an acoustic piano regulation term.

CONTROLLER
A device (wheel, pedal, switch, etc.) for translating mechanical movement into MIDI messages. When a controller is moved, it sends a message telling its current position. Controllers such as pitch and modulation wheels, foot controllers, and sliders are known as Continuous Controllers, because they send a wide range of data values. On/Off controllers such as foot switches usually send only two values of data—On or Off.

TONE GENERATOR
A device that receives MIDI Note On/Off messages and produces sound. More specifically referring to a "synthesizer without a keyboard."

## Yamaha in the News

MIKE GARSON SOLO ALBUM
We're sure Mike Garson needs no introduction, as he's been mentioned in a number of previous "Tech Gazette" issues. For those of you who were unable to attend the PTG Convention in St. Louis (or missed the Convention Awards Banquet on Wednesday evening), you'll have to ask someone who was in attendance for all the details because we don't have enough room in the "Tech Gazette" to elaborate.

What we do want to mention is that Mike Garson is currently in the process of completing the first ever album by *any* artist using the Yamaha MIDI Grand Piano as a "solo" instrument.

This premiere recording (as yet untitled) is scheduled for release on the CBS Masterworks label in early 1989. Mike Garson's new solo album (his third) is being produced by Stanley Clarke and will include a version of Michael Jackson's "Man in the Mirror." This is Mike Garson's first solo recording on CBS Masterworks, a label which is generally regarded as one of the most prestigious labels in the recording industry. Congratulations, Mike!

## Calendar of Coming Events:

**1988:**

Sept. 30-Oct. 2: Florida State Jacksonville, FL
October 7-9: Ohio State Seminar Columbus, OH
October 14-16: Texas State Seminar San Antonio, TX
October 20-23: New York State Seminar Syracuse, NY
October 28-30: Central IL Seminar Normal, IL

**1989:**

January 20-22: Winter NAMM Anaheim, CA
February 17-19: California State Fresno, CA

YAMAHA®

# The International Scene

**Charles P. Huether, RTT**
**Chairman, International Relations Committe**

## *International Activities*

I would like to thank Fred Odenheimer, longtime chairman of this committee and author of this regular *Journal* column. As some of you may know, Fred has "retired" as chairman, and I have the job of trying to fill his shoes. Fred does not have large feet, but he sure has covered a lot of ground during his chairmanship. He has an extraordinary list of accomplishments and extended service in the area of international relations. No one will be able to replace him. That said, here we go.

First, dealing with timely matters, those of you who did not get to St. Louis for our annual convention missed an extraordinary display of pianos, covering a wide and substantial sampling of our international manufacturers. In alphabetical order, Baldwin, Falcone, Steinway, Walter and Wurlitzer, we had a substantial sampling of European instruments, including Bosendorfer, Fazer, Ibach, and Seiler, plus a substantial representation from the Pacific rim, including Samick, Sojin and Young Chang from Korea and Kawai and Yamaha from Japan.

Also in St. Louis, we had a visit from Seiichi Utsunomiya, secretary of the International Association of Builders and Technicians (IAPBT). He came to present the plans for the next IAPBT meeting which will be hosted by the Japanese and held in Kyoto next June 10-13, 1989. Plans call for two days in Kyoto and two days in Hammamatsu.

Our committee will be developing an extended tour of China and Korea while on our way to the Kyoto meeting. Anyone interested when details become available, please contact me or the Home Office and get your name on the list. Should you want to go to the IAPBT meeting without being a part of the PTG tour, let me know also, and the details of the Kyoto meeting will be made available to you.■

## *President's Message...*

there are many positive ways to make the difference greater. First and most important is for RTTs to advertise as RTTs. I realize that many established RTTs do little advertising and that Associate members, particularly those who are new in the business, do a much larger amount of advertising. But whenever RTTs advertise they should mention being an RTT.

Future promotions and literature will encourage to people to look for an RTT not just "a member of the Piano Technicians Guild" because only RTTs have been tested. The new PTG film explains that RTTs go through testing and tells people to look for the logo and for members who are RTTs.

I'm hoping to have the Home Office put together a literature rack that will go in piano and music stores which will have various PTG pamphlets and a directory of local RTTs. The Continuing Education Committee will be working on establishing a point system of CEUs (Continuing Education Units) which could be required to maintain RTT status. This would help ensure that RTTs are well qualified.

These two issues I see as main concerns. If you have other problems or concerns, please write me at 6520 Parker Lane, Indianapolis, IN 46220-2259.■

Announcing the Evolution of a New World Standard!
Reflecting Three Decades of World Class Quality and German Scale Design Superiority...
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Every Samick piano incorporates the same carefully selected materials and is built to the same exacting standards. As a result, from console to professional vertical to grands, each Samick piano represents the finest instrument of its type. Never satisfied with the achievements of the past, Samick continues to develop new musical instruments such as the exciting Samick Digital Grand Piano and a full line of acoustic pianos.

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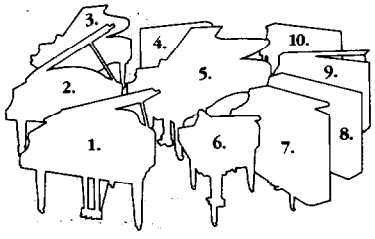


1. SG-140A Polished Ebony
2. SG-155 Polished Ivory
3. SG-185 Satin Walnut
4. SU-118A Satin Mahogany
5. SG-225 Satin Ebony
6. SE-876G Polished Ivory
7. SU-421 Satin Walnut
8. SU-108 Polished White
9. SU-108I Satin Walnut
10. SU-118S Polished Ebony

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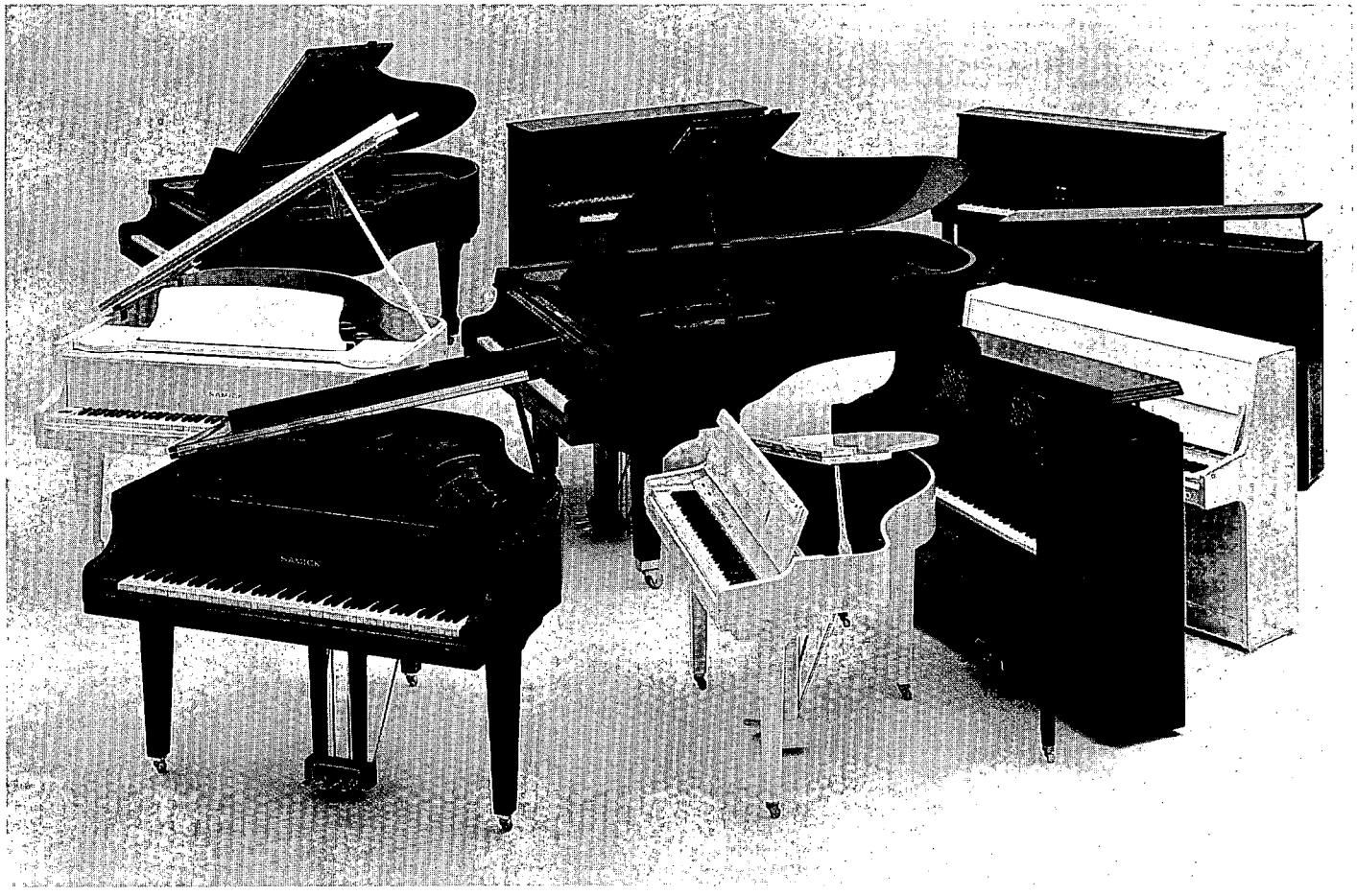


# *St. Louis Convention & Technical Institute: Excellence In Many Forms*

**Susan Graham**
**Technical Editor**

At a convention, information is exchanged in two ways. One is formal: the Institute classes and tutoring. The other is informal: from breakfast in the coffee shop to late nights at our social gatherings, we talk, talk, talk pianos. I hope this report will capture the spirit of both sorts of activity. For Institute coverage I've enlisted the help of four talented writers: Vivian Brooks, Michael Travis, Teri Powell and Mitch Kiel. This approach to class reviews adds diversity to the report, and it gives me a chance to introduce their work to the *Journal* readership (hoping to pressure them into further contributions). I should probably warn you about Mitch Kiel's sense of humor, but perhaps I'll just let you discover it for yourself. I might also mention that Rick Baldassin and I held a meeting with interested parties to brainstorm about the *Journal* (this will be a regular feature at conventions); in a later issue I'll outline some of the suggestions made and the changes which are planned as a result. For now, my thanks to the four "volunteers" and to everyone who is putting time and energy into improving this *Journal* of ours.

The exhibit hall is the scene of some of the liveliest of the informal exchanges. It provides a gathering place in the midst of a stimulating array of products and supplies. As an integral part of convention week, the suppliers and manufacturers deserve our thanks for providing this venue, supporting the Guild (and giving us all an opportunity to rid ourselves of troublesome extra cash).

Tool supply houses are represented in full strength. A novice technician can do worse than to hang around these displays, watching and questioning as the more experienced technicians crowd in like eager chickens — "what's this for? do you have one? does it work?" Catalogs are wonderful but it is even more useful to pick up the tool, examine the part, compare notes and question the supplier. The big houses — Schaff and American — displayed an enormous assortment of goodies, including a wide representation of imported parts from American, and Yamaha tools and polyester repair kits at Schaff. The smaller houses featured specialty items: Pacific, for instance, carries the Peterson keypin cleaner, Mehaffey tools, a padded stretcher protector, and an alcohol-based, grease-free polyester polish. Superior Imports is the company we have to thank for initiating the availability of high-quality Japanese-made action parts: they had these and their instructional videos on display. Raye McCall was showing assorted glues, epoxies and lubricants, and is now also a supplier for the Foredom tools. The Pianotek display included hammers and humidity gauges; Brooks Ltd. carries their own Nu-Tone hammers (now available with mahogany moldings), Isaacs hammers, action parts, and a hammer boring jig; Ari Isaac makes hammers and bass strings. The Inventronics booth not only featured their electronic products but gave those with questions a chance to talk to the inventor himself, Dr. Al Sanderson.


Sunnlights, Inc., of Norwell, MA, showed a very nice line of clamp-on and freestanding halogen lamps. Having good work light is something many of us neglect, even though it is critical not only for efficiency but for "image." As the owner, technician Paul Rattigan remarked, would you trust a dentist who worked on you with a penlight held in his teeth? For that matter, would you trust an electrician who carried his tools in a shopping bag? Bruce Genck was

# Presentations Focus On Industry

Participants in the Guild's 31st annual convention activities received a broad-ranging look at the current status of the piano industry, thanks to several presentations during the convention week.

Kicking off the convention, keynote speaker Karl Bruhn, immediate past president of the Piano Manufacturers Association International and newly elected president of the American Musuc Conference, outlined plans for an extensive three-year promotional campaign aimed at increasing consumer awareness of the benefits of playing the piano.

The campaign, which will be funded by a grant from the National Association of Music Merchants, will use advertising and publicity in national consumer media outlets to focus attention on the importance of the piano. The grant, which will be administered by PMAI, was announced during NAMM's recent summer trade show in Atlanta, GA.

Bruhn, senior vice president of Yamaha Music Corp. USA, noted that technicians have an opportunity to play an important role in this program because of their regular and frequent contact with the piano-playing public. Noting that the approximately 3,500 members of the Guild reach into hundreds of thousands of households in the course of a year, Bruhn urged the Guild to take part in the "piano popularization" program and to become more active in greater cooperation among industry groups.

The theme of cooperation was amplified during a "piano summit" panel discussion later during the week. Panelists were Bruhn; William McCormick, immediate past president of AMC and President of Jordan-Kitts Music; Guild President Marshall B. Hawkins; Robert Silverman, editor and publisher of *Piano Quarterly* Magazine; and Dolores Zupan, president of Music Teachers National Association. Frank Wilson, M.D., a California Neurologist, author of the book "Tone Deaf And All Thumbs," and organizer of a series of medical conferences on the biological aspects of music-making was moderator.

Duscussion covered efforts by organizations and individuals to promote the piano. Besides the PMAI program, these included efforts to identify new markets for piano-playing, such as the growing and increasingly significant population of older Americans, and evaluating the ways in which music is currently taught.

Also part of the week's activities was a presentation aimed at St. Louis-area teachers conducted by the Guild Teacher Relations Committee and the St. Louis Chapter. Presentations by Dean Shank, Owen Jorgensen and Kristin Schmidt, focused on better ways of communication between teacher and technician.

*Editor's note: look for more information on the "Piano Popularization" program and these convention presentations in a future issue of the* Journal.

there with his technician-friendly tool and string cases (and canvas covers for them, to prevent unfortunate experiences in airline baggage compartments); Robert Conrad/Greg Hulme also showed tool cases (and Accu-tuners). Moving further into peripherals, we had Larry Fine selling copies of "The Piano Book" (once again, a chance to see the product and talk with the writer); Jennifer Reiter of J & M Fabrications had aprons and other piano theme items, and makes custom piano covers (and specialty items such as a hardware-free, no-case-damage-guaranteed jumpsuit for piano mover extraordinaire Jim Geiger). Anyone who's put on a Steinway soundboard decal with the old varnish method can appreciate the dry-transfer style available from Decals, Unlimited; a wide assortment of other names and styles are available and listed in a new catalog (they also carry a rather elegant piano dolly). John Travis was selling copies of his books, and piano novelties. Rosco, the stair-

# A Quick Scan Of The St. Louis Convention

**Don Valley**
**Western North Carolina Chapter**

*July 16, 3:00 a.m.* — Leave Spartanburg, SC. Twelve hours later, from the back seat of the car: "Look!! Look!! There's that arch, Dad!" ... and with tapering excitement, "but I thought it would be a lot bigger than that."

That evening, standing under that arch - same voice: "Oh, look!! There's an airplane; I wonder if it's going to fly through the arch!"

*Perspective.* Depends a lot on the perspective, doesn't it? Not too terribly impressive from the distant view a few miles away. Awe-inspiring when you are seemingly a part of the whole thing standing right under it.

*Perspective.* Perhaps, as the annual convention time was approaching, your impressions of the event's great value were overshadowed by that ever-present time-off-no-money-made attitude. Then by following your hunches, you attended the convention and from the internal viewpoint remarked, "wow! It's so great that even the week away from my work and the expense of coming are insignificant."

From the top of the arch 630 feet above ground, I scanned the St. Louis panorama. The buildings, each with unique features, had something of enjoyment to reward the viewer. The river, its riverboats, ribbons of highways and streets, the capitol, the Union Station, the tops of tall buildings, the park below. I was at the top of the "Gateway" seeing in full life the product of excellence in planning and design of a city for today. From that precipice, we moved a few blocks up to the restored riverfront district for a very memorable dinner evening (it was the 20th birthday of my daughter, Ingrid. Families love these conventions!!)

As we were strolling over the old cobblestone back to the new glorious and spacious headquarters for the week, the Adam's Mark, I realized another "Gateway to Excellence" — I was on the threshhold of the 31st Annual convention of the Piano Technicians Guild, Inc. I took a few minutes to scan the panorama of seminar topics. Each, in its own identifiable way had "excellence" written throughout its description.

*Continued on next page*

Decisions. Decisions!! well, I decided!

First, as a delegate from my chapter, I chose to attend the council pre-briefing meeting that evening. On the heels of that was the premiere showing of the new PTG film, "The Unseen Artist" Magnificent! And that is a totally inadequate expression. It will be a great asset to any chapter in many more ways than space here could allow. As for that matter, I acquired a VHS copy for my own personal use; that's how valuable I feel it is for helping my business and the awareness of PTG by my clientele.

The next morning, Sunday, your Council convened for two days of deliberations on your behalf. With your board members all present and your chapter delegates all in place, some major directions took place. The choice to retain, unmodified, the logo now in use was passed. The proposal to require re-examination of all RTTs each five years failed. Many other issues received attention, some hot, some simply a word change in a bylaw. Other larger projections were catapulted, such as the finalization of a scheme for continuing education.

After two days of council sessions, our new president and vice-president surfaced: Ron Berry and Nolan Zeringue, respectively. The opening assembly Monday evening became the official start of the convention with a great reception and concert given by Baldwin to cap it off.

Throughout the week, the exhibit hall was a mass gathering point for technicians over and over again. Drawings for great prizes kept excitement high, especially a trip to Japan given by Kawai. Of immeasurable value are these familiarization opportunities with the major company reps. This provides a way to get to know them personally and means a great deal when you are known by the manufacturer you will be talking with long-distance.

For example, how many of you know personally, Bob Mair and Steve Smith, owners of Dampp Chaser; Peter Goodrich of Steinway; Ed Shadler of American Piano Supply; Ed Whitting of Young Chang; Ray Chandler of Kawai; Alan Vincent of Baldwin; George Wiederer of Schaff; Evan Tublitz of Rud. Ibach Sohn; Charles Walter of Charles Walter Pianos; Roger Weisensteiner of Kimball? And on and on.

The exhibit hall, full of opportunity awareness, presents for

*Continued on page 14*

climbing piano dolly, put in an appearance.

Several cabinetry/bench suppliers had displays: Fleisher (which makes custom reproductions and stocks Steinway style case parts; Paul L. Jansen, who carries artist and standard benches, stools and piano dollies and trucks; Donnell & Fischer Soundboards, of Lafayette, LA, (unfortunately, I didn't get a chance to speak with them). Posey, Inc., soundboard manufacturers in Hoquaim, WA, was present; as reported after winter NAMM, the company is doing very well, and had an eye-catching display table which bore a remarkable resemblance to a grand keybed. Last but not least among the suppliers was Dampp-Chaser. This company was purchased two years ago by Bob Mair and Steve Smith; several changes have been made, including making the basic rod unit black, and simplifying installation of the humidistat by use of velcro (easy on and off and no buzz...). They also carry humidity measuring equipment. Speaking of peripherals, McAllister Software displayed use of their software package specifically designed for piano technicians (see class review in this article). And speaking of education and information, the Museum of the American Piano had a booth featuring a square grand action (perhaps a better use than its original intention as part of a piano). They are gathering and preserving the history of the American piano making industry and have are accumulated an impressive list of instruments.

Two of the centers of instruction available for piano technicians were represented, with Randy Potter of Bend, OR, showing his video course, and Bob Perkins representing the residence school he runs in Elyria, OH.

As if this weren't enough, the manufacturers' technical representatives were in attendance, usually with a piano or so. Baldwin, Kimball/Boesendorfer, Yamaha, Sohmer, Samick, Seiler, Walter, Sojin, Kawai, Wurlitzer, Fazer, Ibach and Steinway displayed instruments in the hall. Falcone was present in a separate room, giving an opportunity to see and hear the pianos and to talk with Santi Falcone and Robert Antonian. For those who rarely get a chance to see some of these instruments, this was an excellent opportunity to do so. It was also a time to establish a little personal contact with the reps — the voices at the end of the phone — but in the interest of everybody's sanity, I might point out that the convention is not the best time to air complaints about specific pianos. It is virtually impossible for anyone to carry complete warranty files around in his or her head: these meetings are best used for general discussion and information-gathering. Send the specific complaints to their offices in writing....

Just in case anyone is hanging around bored in the evenings, there are a number of social events courtesy of the manufacturers. Baldwin hosted a Monday night cocktail reception, featuring jazz pianist Adam Makowitz burning up the SD-10. On Tuesday, Young Chang and the St. Louis chapter hosted a riverboat cruise (I missed it — a good thing, since it turned out to be hazardous for edi-

## *A Cast Of Thousands*

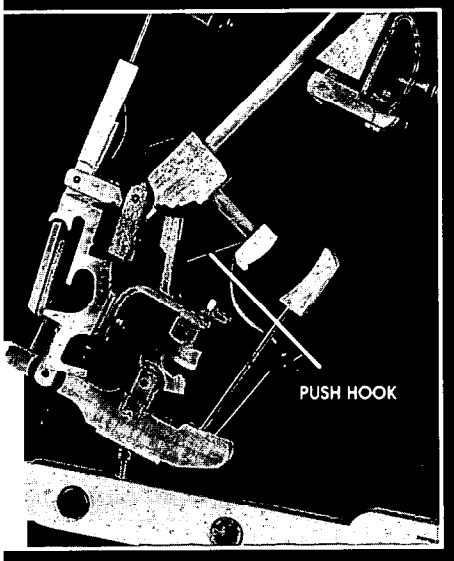
For the second straight year, convention attendance topped 1,000. The St. Louis convention drew 1,013 registrants, still behind last year's record gathering of 1,161 in Toronto but a big improvement over conventions in the early '80s, which declined to below the 600 mark.

The 1988 convention total included 680 Guild members and 187 non-member technicians.

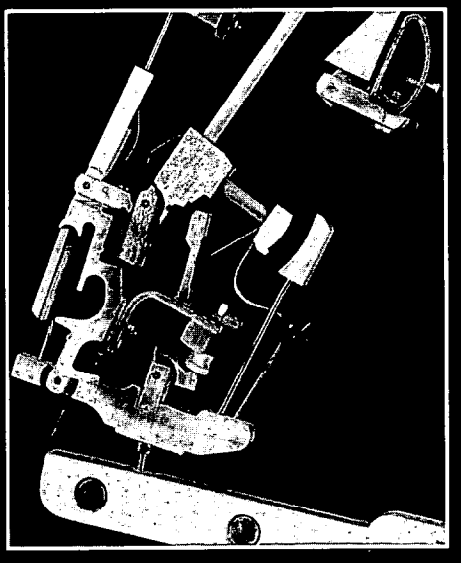
Support for the Guild convention by manufacturers and suppliers reached new levels this year as well. The convention attracted a record number of exhibitors (see coverage elsewhere in these pages). More than 50 10- by 10-foot booths were sold. Companies also contributed extensively by hosting social activities and bringing in special instruments, speakers and performers.

# by Kimball

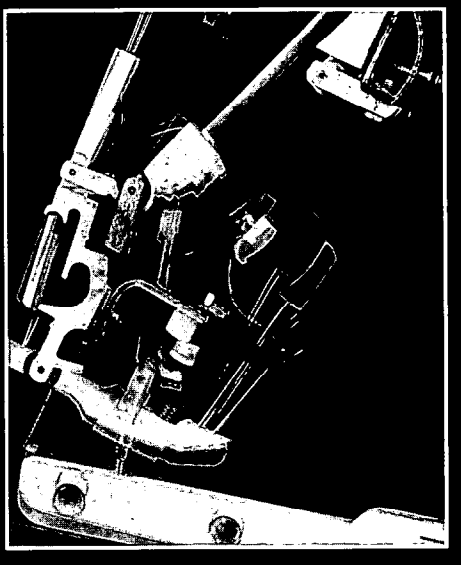
## Performance — like no other direct blow action in the world.




The unique "push-hook" attached to the catcher, replaces the back-stop rail.



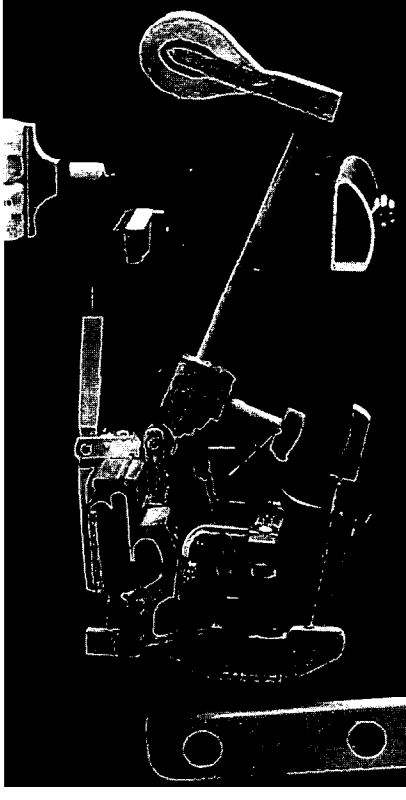
As the key is depressed and the hammer approaches the strings, let-off is about to take place. The "push-hook" will limit the jack travel.



The jack returns more quickly than on a standard action. Repetition is 2 times per second faster than other actions and the ability to trill inside the keystroke is dramatically improved.

An action that performs like no other. Adjustment is simple, stability is built in.

The Langer 80 B.P. System is found only in the new Classic Studios by Kimball.



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*Continued from page 12*

your perusal those "things" you work with in making a livelihood as well as meeting the needs of your clientele. Better and improved? More expedient? New? Another One? Yes. All of these, and more. New soundboard companies and old. New hammer makers and old. New parts specialists and old. Aprons, ties, decals, stair-climbing dollies, specialty tools, cases, polyester repair kits, you name it! Nowhere else do you have such a chance to feel, pinch, hear about, fondle, play, play with, get free tools, critique, judge, and compare those items pictured in your catalogs and brochures.

Nevertheless, with wisdom one must also get knowledge. The richest wealth of just that is personified and ready to be taken advantage of in the intensified schedule of seminar classes. The class offerings are serious, intense business. Let me ask you some questions. Did you learn from Richard McAllister about increasing your business 30 percent in only one year and keeping that direction solid? Did you learn from Gary Neie how to permanently eliminate the problem of stripped screw holes from mounting pedal lyres? Did you learn invisible joint repairs in Webb Phillips' class? Did you learn in Ray Chandler's class on "Piano Diagnostics" what to do when the piano is in accurate regulation and exact proportions and yet does not "feel right?" Did you learn in the Baldwin class proper techniques for weighting keys?

Did you learn from Bill Brandom of Yamaha how to approach the new Disklavier? Did you learn, as taught by Isaac Sadigursky, how to be more comfortable with agraffes? Did you learn of Pratt & Read's earliest ivory involvements? Did you learn from John Zeiner a professional but very simple way to accurately make sandwiched pedal bumper pads? Did you learn in Jim Harvey's class how to very simply make a retainer for elbow wires when removing and carrying a spinet action?

Did you have a hearing test? Did you learn how Jack Krefting works with judging adequate or inadequate downbearing and what to do about it? Did you learn from our technical editor, Susan Graham, how to drill inside the grand piano keybed with your drill under the piano? Did you learn from Mark Anderson how to extract a hammer shank broken

*Continued on page 15*

## The Exhibit Hall




tors — just ask "Lefty" Goldsmith). Wednesday evening before the banquet we enjoyed a performance by Panayis Lyras on Steinway's commemorative 500,000th piano; yes, the piano, Wendell Castle case and all. Not only was it a sterling performance and a wonderful display of power-to-spare Steinway sound, but we were permitted to examine to see this unique instrument at close quarters. Not to be outdone, Yamaha provided banquet entertainment on four Disklavier verticals, featuring recordings made in the Yamaha booth in the display hall. They also brought in Mike Garson and the MIDI grand for their Thursday night party (the originator of these after-hours scenes). Kawai came up with an interesting alternative to a big bash — they held a drawing, and three lucky technicians won a trip to Japan.

Having now set the informal scene, I hand you over to the class reviewers, hoping that what they have to say will further entice you to join us next year.

Send comments, questions, and other correspondence to:

**Susan Graham**
**Technical Editor**
**2967 Madeline**
**Oakland, CA 94602**

## Practical Touch-up And Case Repair

Angelo Mastagni, entering his

*Barbershoppers perform on the riverboat cruise*

*Hall of Fame Inductee Jack Sprinkle*

*Ellen Sewell introduces the film*

*Riverboat gamblers*

*St. Louis President Dee Schaefer*

*Portland Chairman Taylor MacKinnon*

59th year in the piano industry, shares his knowledge without reservation. He began in a piano refinishing shop and has had his own rebuilding shop, several retail stores, and private tuning/repair business in Connecticut over these many years. Here is a glimpse of the ideas he presented:

Lacquer or varnish finish? In general, pianos built before 1929 had varnish finishes; after 1929, lacquer. After 1933, there were virtually no manufacturers that used varnish. As a quick test: in an inconspicuous place use denatured alcohol on a cloth and brush over finish — if it is a varnish finish, the cloth will stick as the finish becomes "gummy".

During the class I attended, Angelo removed a dominant scratch from a bench top with items you could borrow from the homeowner where you need to make the repair! First, he spread vegetable oil (I think it was Wesson) over the scratch; next he sprinkled a liberal amount of scouring powder (Bon Ami has the finest grit) over the oil. Fine steel wool rubbing this mixture (with the grain!) literally removed the scratch. The finish was restored by fine sanding with silicone carbide 240 paper and naphtha, followed by a good grade of furniture polish. He made a remarkable improvement.

Rubbing compound (extra fine grade from automotive shop for hand rubbing only) will restore the sheen and clean appearance on plas-

*Continued on page 14*

flush with the butt or head — even cedar — and yet, not drill it out? Did you win four days' free lodging in Portland at next July's convention because your ticket had the winning number at the closing luncheon? Were you on a cruise down the Mississippi Tuesday evening, July 19, having great fun and food with several hundred PTG members? Did you observe the Steinway concert played on its latest museum-type piano, serial #500,000 and then attend their sumptuous reception? Did you hear Yamaha's Midi Grand concert during their Thursday night reception? Did you lounge in any of the many plush areas at the Adam's Mark to give and take with other colleagues across this land? Did you even stand by and listen?

If your answers were NO to this representation of events, you missed one of the most valuable experiences in the life of any professional and growing piano technician. There is no doubt about it — you are the loser!

I answered YES!! And I am the winner! (Not of the drawings, sorry to say; but I was there and had my chance.) I know it! I feel it! I will declare it! My business will reflect it!! How many of you rubbed elbows with such distinguished attendees as Susan Graham, your *Journal* Editor; John Travis, our first president and author; George Defebaugh, recipient of this year's Golden Hammer Award; Marshall Hawkins, PTG President; all the other officers; the home office staff; Ginger Bryant, president of the Auxiliary; Fred Drasche, Steinway; Paul Jansen, third generation piano bench maker — only to name a few?

Each year, this apex of professional training is provided for you. People with the most revered reputations in their skill areas are there to share with you. There is no holding back. They are the best in the world. So can you be, but not without this kind of involvement and interaction.

Yes, there is a cost. But the lasting rewards so far outweigh that aspect. I invite you to take me up on the challenge. No one has yet been anything but successful. Incidentally, eight of the 13 members of my chapter were in attendance, including ALL of the officers. They all said they would do it again. With 1013 participating this year in St. Louis (Only Toronto's last year was larger),

*Continued on page 16*

tic natural keys.

The use of lacquer sticks was demonstrated. For most jobs, Angelo finds the transparent sticks the best. He melted the stick onto his "burning-in" knife and filled in the void. He then wiped down the blemish with naphtha, scraped the surface even (for this job, a razor makes a fine scraper: rub blade across your wet rubbing stone) and proceeded to polish-finish the surface. He produced a good result.

To do the above job, Angelo made his own burning-in knife and his own alcohol torch. To make your own knife, here are his instructions:

*Step 1:* Procure medium or heavy trap spring for blade. Draw temper by heating red-hot with blowtorch or gas flame. Set aside to cool slowly. When cold, cut off small rounded end with hack saw. Then grind or file to good square end. Polish off burrs with fine sanding disc or fine grinding wheel. Buff or polish end surface that you will use to apply burning-in shellac to dents or scratches.

*Step 2:* Procure a 7/8-inch dowel, broomstick handle, etc. Cut off a 4 1/2-inch length or for a personalized length, one that will feel comfortable from the base part of your palm to where your pointing finger will rest comfortably to the curve you will be making in the handle to apply pressure. Then saw a 1 7/8-inch slot on one end to receive the portion of the trap spring that has the two holes in it. Round the end that will fit in your palm and cut or rasp the other end and with a curve that will accommodate your finger, drill and countersink two holes to hold the blade in place. Install knife with epoxy and screws. Fill slot with plastic wood, shape, saw and finish as desired.

To make your own alcohol burning-in torch: procure an oil can. cut off spout to size desired; minimally 1/4 inch or larger. Make a wick by rolling cotton string (white 100 percent cotton embroidery skeins work well) around a square of cardboard six or seven inches wide. The skein of string thereby created should fill spout fairly tight. Draw this skein of string up through the spout by looping a single string through the skein using it for a leader. cut and square off the wick protruding from the spout. A cover for this spout will be needed for if it is left uncovered it attracts moisture and will not light readily. A cover can be a pen top or a top from an old magic marker.

Another process demonstrated was french polishing. The first key to this is to make your pad correctly: always turn the quarters of a good size square of washed cheesecloth into the center until you get a nice full pad. Proceed with pouring your Qualasole (Mohawk) shellac onto your pad and laying smooth light layers quickly over the surface — many, many coats. A supplier of wiping cloths, washed cheesecloth for padding, etc. is F.P. Carey Co., Inc.; P.O. Box 1228; New Britain, CT 06050; phone (203) 224-2459.

Angelo lived up to the name of his class. The repairs were almost all able to be conducted in the client's home and they were indeed practical. I think many of us caught Angelo's natural enthusiasm and were inspired to go back to our shops and do a little experimenting.

*Vivian Brooks*

## Tone and Friction — Facts and Fiction

In this fast-moving and informative class, instructor Rick Baldassin covered many areas of friction in grand actions, describing general service procedures he has found efficient and effective in improving performance, and at the end demonstrating the measurable benefits of proper friction in a hammer center for the tonal output of that hammer.

Though the emphasis was on grand pianos, some of the processes involved would be similar if not identical for uprights. My only wish is that this class had been about 15 minutes or so longer, since it ended just when it was getting most interesting. If you weren't able to attend this class, buy the tape — I think you'd still get most of it. The following is from my notes; any misstatements or errors are entirely my own.

The friction areas of grand actions covered in some detail in the class were: keybed, keyframe, glides, return spring, action guide pins, una corda lever, dags, keypins, key balance holes, key bushings, capstans, repetition springs, knuckles, and action centers of the wippen, balancier, jack and hammer. In the first part of the presentation, a pattern seemed to develop, which could be summarized as follows: proper servicing of friction areas means repairing or regulating (as needed) to restore shape or fit; cleaning, smoothing and/or polishing contact areas, and then applying a lubricant if appropriate. Space does not permit going into much detail here, but I think a few items are especially worth mentioning.

McLube 1725 Aerosol (available from McCall Piano Service, phone 714-622-8826) provides a tough, long-life low- friction colorless coating on wood and metal surfaces that is ideal in many of the areas mentioned. In the areas of the keybed and keyframe, for example, after vacuuming, rubbing with naphtha (to remove old graphite and other lubricants) and a light sanding, you can spray one or two coats of McLube 1725 on the front rail, back rail and glide dowels of the keybed, and on the front and back rails of the keyframe. Clean, smooth and polish the glides, return spring and action guide pins and coat with McLube 1725. Sand the keyframe smooth at the return spring contact area, and spray with McLube 1725. Caution: mask off dark-finished surfaces to avoid hazing with overspray.

Rick showed us a specially modified plug cutter with a drill bit mounted inside that he uses to cut maple plugs with neatly centered holes. These plugs are very useful as substitutes for those hard and noisy little phenolic inserts you get with a balance hole repair kit. Rick also showed us a scraper he made from a hacksaw blade which he uses to clean and smooth repetition spring slots prior to brushing on a coating of McLube 1708 Liquid.

In the last section of the presenta-

*Continued from page 15*

there has to be something all those people know to be valuable. They know they are not spending money for fun and frivolity but for serious, jammed-up seminars full of lasting treasures for the seasoned as well as the beginning technician.

Did you go? would you go? Are you professional? To these and all the other questions, I hope your answer is not NO! Mine is a loud and resounding YES!! Whether yes or no, just get on with it and start your planning right now for our next one, the second week of July 1989, in Portland, OR, and take advantage of horizons here and beyond.

tion, Rick covered friction in action centers. He pointed out that what we're after here is not minimum friction, but rather an appropriate amount of friction to optimize performance and tone. He suggested using a gram gauge and pinning tools to achieve the following specs:

*Hammer centers:* 5-9 grams, graduated from treble to bass, so that you get a consistent 3 1/2 - 4 swings in the swing test for all hammer centers.

*Wippen centers:* 6 (+/- 1) grams (approximately the weight of a nickel at the flange screw hole)

*Balancier centers:* 5 (+/- 1) grams (approximately the weight of a dime on the drop leather)

*Jack centers:* 2 - 3 grams (the long arm of the jack should fall slowly of its own weight)

For the record, Rick listed his suppliers for special high-quality reamers: Kleeban Tool, 28 NY Ave., Westbury, NY 11590 — Lavallee and Ide Reamers, .048" to .055" (straight-fluted, for cloth bushings); Johnson Carbide Products, 14225 25th St., Saginaw, MI 48601 — .048" to .051" (straight spoon reamers, for teflon bushings).

Finally, with the assistance of Chris Robinson and his spectrum analyzer, Rick showed that just repinning a hammer center aurally selected due to weak, somewhat thin tone produced a measurable and audible improvement. Rick used a standard weight to play the key, and Chris took "snapshots" of the sound spectrum before and after the repinning. Many in the class immediately noticed the change as an audible "blossoming" of the tone, and it showed up on the scope as a substantial increase in volume of several partials as Chris displayed alternately the before and after spectra. The hammer center had been tightened from 8-1/2 swings to 3-1/2.

This was a remarkable demonstration, which clearly showed a connection between tone and friction, and should do much to dispel the myth that action centers are supposed to have as little friction as possible for optimal performance.

Thanks to Rick Baldassin for a interesting and enlightening class. I hope we'll be hearing more from this talented and knowledgeable instructor at future conventions.

*Michael Travis*

*Chris Robinson and his spectrum analyzer.*


*Guild President M.B. Hawkins*

*A seminar for area teachers*

*Institute Director Ernie Juhn*

*Steinway's 500,000th piano*

## Welcome to the Laboratory

A mad scientist lurks inside many piano technicians, including Connecticut's slightly brilliant Chris Robinson. He is an articulate presence who respects intellectual vigor and objective judgement. Middle age and youthful curiosity have inspired him to embark on a quest for accuracy in measuring piano sound.

On almost everyone's list as their favorite class, "The Voicing Project" was a peek at Chris' new fascination, a spectrum analyzer. This is a digital electronic device with a microphone and display screen that can show two different graphs of any sound; the first charts time (several seconds) and power (volume), and the second frequency (subsonic to supersonic) and power. The first graph shows a picture of the decay, with tall squiggles becoming shorter going left to right. The other graph was much more interesting. It showed, again left to right, descending sharp spikes at the many partials of a single piano note. Chris demonstrated several techniques of changing the tone by needling a hammer or leveling the strings, and we could then alternate between the two electronic pictures he had recorded (before and after needling), and we could watch some spikes go from taller to shorter and back again, showing a decrease of power at the seventh partial and an increase at the second partial, while others remained unaffected. Precise readings of decibels and cycles per second were available at any frequency. Cool tool.

Chris also showed that:

- the upper partials of a tuning fork are inharmonic;

- partials can exist lower than a fundamental;
- hammers sometimes sound better if you reverse them on the shank (buy new hammers unbored and unshaped, and cut the cove on the correct side with a Forstner bit);
- sets of hammers from different makers may have different optimal strike points on the same piano;
- a curved sanding paddle works well for leveling the hammer to the strings;
- all objects have a resonant frequency;

Chris Robinson's inquiring mind now is connected to a machine that inspects sound. His spectrum analyzer is a more important electronic tool for research than the Sanderson electric tuner, because it shows so many dimensions. The addition of this keen eye should soon add new light to the scrutiny of the piano.

After only a year, Chris has barely had time to learn how to ask intelligent questions of his expensive new toy. Answers will come slowly, and generalizations slower still. He used the word "project" in the class title to imply this is an ongoing endeavor. His financial and intellectual commitment is both substantial and admirable. Without a matron or a grant, it cannot be a fulltime endeavor. Pity.

## The Method

One of our cuter piano couples is Joel and Priscilla Rappaport. "Upright Hammer and Damper Installation — Factory Style" demonstrated what the factory in Germany taught Priscilla when she was rebuilding pianos there. She showed us how she assembled and regulated an upright action from empty rails and bags of new parts. First, install the butts. Then put shanks on the hammers, find the strike line, install the dampers tucked under where the hammers will be, and then glue the hammers into the butts. Priscilla insisted that faith in The Method would help us do top quality work. Keep your elbows out, make your body a machine, quick, quick, quick! Her insistence on quality and efficiency gave us some insight into the Teutonic reputation for high craftsmanship.

Dampers are especially well treated by The Method. The Rappaports install a small set screw in each damper level under the felt at the damper rod contact point to provide extra precision during final regulation. They also use a wood rail clipped to the strings to represent the thickness of the damper felts, so that the damper wires and round damper blocks can he accurately regulated before any felts are installed. Several people got volunteered to install parts on the action models under the watchful eye of our tutor. Seeing plus doing equals learning.

Pianos are designed around the hammer line, and the Rappaports assemble their actions to reflect that fact. There is great comfort in understanding an entire process, because when we can extract a procedure if we need to do a spot repair. Thanks to Priscilla and Joel, more of us know how convenient it is to regulate dampers with no hammer shanks in the way.

## Beginners and Brothers

Computers were a constant topic of conversation. Jim Coleman was the able substitute who taught "Computer Applications — From Learning to Earning." He aimed his class at the novice, and gave good advice to anyone thinking about buying a personal computer. Decide on software first, then shop hardware. Computers do not always make things easier. Addiction can follow acquisition, so beware of spousal jealousy.

Jim listed many popular programs to consider, like Lotus 123, WordPerfect, and Symphony. A Macintosh fanatic gave a pitch for a different type of personal computer, one that is easier to learn and specializes in publishing. Other information included: copy stores sometimes offer high quality laser printing at $1 per page (bring in a floppy disk containing your document, or rent time on their computer); graphs can be generated when calculating stringing scales; using specialized software is easier and will save you your valuable time, but is more costly in dollars.

Richard McAllister had an exhibition booth and taught a Mini-Tech featuring his IBM-compatible program "The Piano Technician's Management System" that was custom written by his twin brother. It keeps track of over two billion customers and ten technicians, lists customer names as they come due for servicing, prints out a Daily Service Report to take with you each morning, keeps an appointment book, does specifiable searches, and automatically displays memos on any customer, service call, or piano. Mailing labels can be generated, and a Service Journal is kept monthly that lists appointments, mileage, income and service description. However, there is no general bookkeeping done by this software, and it presently includes no interface for dumping data into commercially available spreadsheets. The McAllisters indicated that they might offer linking capability very soon and very cheap. It was written and compiled in Pascal, and runs fast enough on an IBM Model 30. There is instant screen help available by pressing one key.

Like any tool purchase, it is important to ask if it will improve your efficiency enough to justify its cost. This software, written specifically for the piano technician, has a hefty pricetag of $795, although that is not considered expensive in the computer world. If you need to include the cost of buying the computer and printer, then 3x5 cards look awfully good, but at least there is a quality alternative.

Richard McAllister said that he wants to establish the standard for piano technician software, and that he wants to scare everyone else away fromwriting another package. He may have done so, but only time will tell. Computers gobble up the future in formidable bites.

## Whoa

Anyone who has ever driven a car knows that the most important part is the brakes. Dampers serve a similar purpose — to stop motion. But howcan all that string energy be quickly absorbed by a damper system that itself must not go into motion? The answer is "very carefully."

John Zeiner is a salt-of-the-earth Pennsylvanian with deliberate and measured speech. To zoom through decades of information about "Making Grand Dampers and Trapwork Work" in only 1 1/2 hours surely required forbearance on his part. But, with many slides and no tangents, he was able to offer some succint wisdom on this vast subject. Don't worry, John said, it's not that tough. Just don't hurry, and do everything right.

He told us now to find the right width for felt strips for rebushing a damper guide rail — cut a point on too wide a strip, pull it through the hole till the sides meet, then slice the trailing part off. To widen a trichord felt, put a silk cord into the cut (it will stay there all by itself). Iron an underlever felt to delay lift of that damper. John does not worry about corrosion on a damper wire at the guide rail caused by worn plating. And he relayed a trick from a Japanese technician — set damper wires finger tight into underlevers deliberately too long, then adjust rod or block pedal so half blow of hammer just begins to lift dampers, pull the action and set wires so underlevers touch damper tray (this same principle is widely used in verticals to regulate spoons).

John learned pianos from his grandfather, and now has four of his own sons in the business. He said it was hard for him to talk about pianos with grandpa once he got smarter than his elderly teacher. May his sons not have the same difficulty.

*Mitch Kiel*

## The Disklavier And MIDI Grand — An Overview

This new Yamaha class provided a fascinating introduction to the company's two new models, the Disklavier and the MIDI Grand. These pianos are in fact hybrids, combining the usual acoustic design with a wide range of electronic capabilities. They have strings and soundboards and may be played just like any other acoustic piano. Should the user desire, however, the electronic components may be switched on, bringing into play an amazing array of music-enhancing functions. It's exciting to think about the many ways they will be put to good use in the educational and commercial areas of the music industry.

The Disklavier is basically a Model U1 studio upright, and may be thought of most simply as a reproducing piano. It uses micro-floppy disks as a recording medium. In addition to its playback and record functions, it can also transpose, alter tempo, and interface with other MIDI-capable instruments (to name just a few of its abilities). The MIDI Grand, on the other hand, may be thought of as a powerful controller. It is used to drive synthesizers and other MIDI-compatible instruments, producing a wide variety of musical and rhythmic effects. The MIDI Grand is currently made in two sizes, the six-foot C3, and the seven-foot-four C7.

Because electronic components are built into both the Disklavier and the MIDI Grand, special care is needed in servicing them. Yamaha's new MIDI specialist, Chris Hoffer, demonstrated the proper way to remove case parts and actions, and highlighted the regulation procedures for both pianos. He also passed around one of the sensor units, allowing a close-up view of the fiber-optic cables used to sense hammer movement and velocity. Chris advises unplugging the power cord before tuning or servicing. Because these pianos are acoustic, not electric, they may be tuned just like any other piano. One should know where the electronic components are, however, and be careful not to poke them with a mute or screwdriver.

The technology surrounding the electronic music industry has spawned a whole new lingo, so MIDI dictionaries were handed out, as well as basic technical information on both pianos. Many thanks to Bill Brandom and his team for preparing materials that even us non- "Midiots" can understand!

*Teri Powell*

# *Institute Review: The Tuning Classes*

**Rick Baldassin**
**Tuning Editor**

The 1988 Institute offered four classes in tuning. These included: "Aural Fine Tuning — for Electronic Tuners" taught by Dr. Albert Sanderson (Inventronics); "Basic Piano Tuning" taught by George Defebaugh; "Efficient Piano Tuning" taught by Charles Huether; and "A Master Class in Temperament Tuning" taught by Bill Garlick (Steinway). In addition to these four tuning classes, there were three classes which were at least partially tuning-related. These included: "Learning to Listen" taught by Joel Rappaport; "Please Speak Up — I Can't hear You" taught by Dr. Barbara Bohne and Dr. William Clark; and "So You Want to Be a Concert Technician" taught by Norman Neblett.

Finally, there were five Mini-Technicals on tuning offered. These included: "Pitch Raising" taught by Ruth Brown; "Listening With Your Accu-Tuner" taught by James Coleman Sr.; "Tempering the Untemperable" taught by Michael Kimbell; "Equal Temperament" taught by William Stegeman; and "Pitch Raising" taught by Sid Stone.

In all, there were 34 hours of tuning and tuning-related classes offered at this convention. This, of course, was too much territory for me to cover by myself, especially considering that I was myself teaching (much to my pleasure) a class not related to tuning. To help with the review of this year's tuning classes, I have solicited the help of Peter Briant of the Montana Chapter, James Coleman Sr. of the Phoenix Chapter, and the individual instructors of the Mini-Technicals. Space and time considerations require that this convention review be spread over two months.

The first class to be reviewed will be Dr. Sanderson's class, reviewed by Peter Briant.

**Aural Fine Tuning — For Electronic Tuners**

Dr. Albert Sanderson's tuning class was again sponsored by Inventronics, Inc. This year's class was titled "Aural Fine Tuning — For Electronic Tuners." The 1 1/2-hour class was offered three times.

Sanderson's Ph.D. in Applied Physics was granted by Harvard University in 1969. Subsequently, he taught electronics at Harvard from 1969 to 1977. He has received eight patents, five of which are presently used in the Accu-Tuner.

Dr. Sanderson has been teaching institute classes for several years now, and as many of you are aware, he played an important role in developing the present tuning test. His earliest classes covered temperament and introduced the features and use of his inventions: the Sight-O-Tuner and the Sanderson Accu-Tuner. Later classes shared information on the pitch raising process, scale design, and more efficient aural checks. Recently, he has emphasized aural techniques that permit refinement of electronic tuning operations.

Sanderson began our class by discussing the Accu-Tuner's Stretch Mode of operation. This method (assuming the piano is at pitch) requires measuring the inharmonicity between the 2nd and 4th partials of F4 (key F-45). The result is called the "Stretch Number" and is entered into the Accu-Tuner's microprocessor, or Stretch Calculator. It computes a 42-note sequence of values from C3 (key C-28) to F6 (key F-69) which the operator then transfers to the piano. The Stretch Calculator gives the operator values for 18 4th partials from C3 to F4, 12 2nd partials from F♯4 to F5, and 12 1st partials from F♯5 to F6.

It is interesting that Sanderson himself criticizes the calculated values of the Stretch Mode as being "too perfect." He says the Stretch Mode concept looks at the whole piano from "too narrow of a window." The computed stretch temperament values derive from a measurement of inharmonicity that is characteristic of just one string in the middle of the piano. Due to many factors, a scale's characteristic inharmonicity varies throughout the piano, so the success of a particular stretch temperament depends on how well

suited it is for a specific scale. By analogy, if we buy ready-made clothes, we should expect a perfect fit only if our physique is average; otherwise, an item may need some alterations.

To determine if the temperament conforms well to the piano, Dr. Sanderson suggests that the operator check aurally at certain locations in order to detect irregularities in the beat patterns. These points are where the Accu-Tuner "downshifts" from reading 4th partials to 2nd partials, and from 2nd partials to 1st partials, which is between F4-F♯4, and F5-F♯5, respectively:

| 4th partials | 2nd partials | 1st partials |
|---|---|---|
| [C3.....F4] | [F♯4.....F5] | [F♯5.....F6] |
| 18 notes | 12 notes : shift point : | 12 notes |

He recommends aurally checking the C4-F4 Fourth against the C♯4-F♯4 Fourth to detect a sudden increase or decrease of beat rates. "The Fourth is our friend," he says, "Look for them all to beat about the same." He suggests that if we detect a sudden increase in the beat rate, the Stretch Number is too low, and if the beat rate suddenly decreases, the Stretch Number is too high.

At this point in the process, he also recommended use of Seventeenths and Contiguous Interval tests. He says adjacent or parallel Seventeenths will beat all the way to the top of the piano because the relationship between the 5th partial of the lower note and the 1st partial of the upper note stays expanded. The operator should check with Seventeenths across the shift points described above.

The operator should also use chains of contiguous Major Thirds and Fourths to detect irregularity. The reader who is not familiar with the term "contiguous" intervals may understand them as like-intervals that are stacked on top of each other sharing a common note. For example: an Augmented Triad (C-E-G♯) consists of two contiguous Major Thirds (C-E, E-G♯). These tests very quickly identify an irregularity.

These tests have been described in previous *Journals* (Baldassin, Sept.'87, p.28.; Sanderson, Nov.'84, p.19). The Sanderson article also appears in the Accu-Tuner Operating Manual (p. A14). It is useful to quote a brief part:

Tests that use contiguous intervals are easy to learn and use, and tell the tuner explicitly which notes are at fault and what to do to correct them. Contiguous major thirds will beat in the ratio of four to five because the major third itself consists of two notes whose frequencies are in the ratio of four to five. Displacing any interval up the keyboard will speed it up theoretically in the ratio of the frequencies of the two root notes involved. Therefore two contiguous major thirds should beat in the ratio of four to five, two contiguous minor thirds in the ratio of five to six. Similarly, two contiguous fourths should beat in the ratio of three to four, and two contiguous fifths in the ratio of two to three. However, on the piano this theoretical relationship holds well only for the major and minor thirds. The fourths and fifths are so strongly affected by inharmonicity that these contiguous intervals beat at almost the same speeds.

If the aural tests indicate a problem, Dr. Sanderson advocates a simple method to adjust the temperament values to compensate. This simply involves trying a slightly higher or lower Stretch Number as indicated above. If, for example, we have selected 6.0 cents for the Stretch Number, and at the shift point, the beat rate suddenly increases, select 6.5 cents as the stretch number, re-tune, and test again. Repeat as necessary until the beat pattern is satisfactory. A little practice will speed up this technique. He advises that only four notes need tuning in order to test for the adequacy of the Stretch Number: C4, C♯4, F4, F♯4.

Another method to modify the stretch temperament was considered, as well. As the Stretch Calculator creates octaves that are one-half beat wide, and as this may be too wide for some tastes, adjustment can be made by choosing a lower Stretch Number, and "offsetting" the lowest 18 and highest 12 values of the stretch temperament, keeping the middle 12 the same, thus retaining A4 at 440 Hz. In other words, the Stretch Number affects the size of the temperament octave, and the outer two sections of the temperament can be skewed up or down to alter octave size.

The example suggested in class required the operator to determine a Stretch Number (6.0 cents), then enter a slightly lower Stretch Number (5.5 cents). Notes F♯4 to F5 would be tuned to the 5.5 Stretch Number. The Accu-Tuner would next be recalibrated (or reset) to plus 0.5 cents (retaining the previously determined 5.5 stretch values) to tune notes C3 to F4. Then the Accu-Tuner would be reset to minus 0.5 cents to tune notes F♯5 to F6. This would appear as follows for a piano which measured a 6.0 Stretch Number:

| (5.5 cent stretch #, offset +0.5 cents) | (5.5 cent stretch #) | (5.5 cent stretch #, offset −0.5 cents) |
|---|---|---|
| [C3.....F4] | [F♯4.....F5] | [F♯5.....F6] |

If the Stretch Number is lowered, then notes C3 to F4 must be offset positively by the amount the Stretch Number was lowered, and notes F♯5 to F6 must be offset negatively by the same amount. If the Stretch Number is raised, the opposite would be true. Be sure in all cases to check the shift points between F4-F♯4 and F5-F♯5 as described above.

The above are examples of how modification of the stretch temperament might be attempted. I understand that more detailed articles on the subject will appear in the future.

Sanderson provided a six-page handout of tables and graphs. Several of these showed the effect of using wrong Stretch Numbers on partial frequencies and beat rates in comparison to a correct tuning. The remaining charts graphed beat rates of correctly tuned contiguous Thirds, Fourths, and Fifths. My only recommendation would be for the inclusion of a page of explanatory notes either to aid review, or to help someone in the local chapter with whom the handout might be shared.

Whether we use Dr. Sanderson's technology or not, we in the field of piano work must sooner or later recognize his contribution to our understanding of the piano tuning process and the physical forces upon which it is based. It is instructors such as Sanderson that make ours a dynamic, progressive technology. I believe it would be in the best long-term interests of the art of music, our customers, and our profession if we all shared a little more of his vision.

**Efficient Piano Tuning**

I was pleased to attend the next class, "Efficient Piano Tuning" by Charles Huether, and found it most

interesting. I felt it would be difficult to tell Charlie's stories as well as he did, so I am proud to announce that Charlie will author a series based on his class which will appear in the *Journal* in the near future.

**A Master Class In Temperament Tuning**

The final tuning class, "A Master Class in Temperament Tuning" taught by Bill Garlick (Steinway), is one which I have attended on several occasions. It was a three hour class which was offered twice during the convention. It was mentioned in the class that all fixed pitched instruments require some satisfactory compromise of what is known as Just Intonation. This requires that intervals be mis-tuned from Just or Perfect. The act of tuning an interval "imperfect" or "unjust" is known as tempering, and we call the result TEMPERAMENT. It was stated that the combination of choices for tempering are overwhelming, and that for this reason, this class would limit itself to information which illustrates what must be heard to achieve the compromise of Equal Temperament on the modern piano.

In equal temperament on the modern piano, there is not one interval that is tuned just or perfect. All intervals are tuned wider or narrower than just and will produce beats. The wide intervals are: Major 3rds, Major 6ths, 4ths, Octaves, Major 10ths, Major 17ths, and Major 24ths. The narrow intervals are: minor 3rds, and 5ths.

Bill made the point that to take a single interval and temper it by listening to the resulting beat is not accurate enough. It is necessary to test each note of an interval to a third note, which we call the test note. This creates three intervals, one actually being tuned, and two others whose beats we compare to determine the accuracy of the interval we are tuning. As examples of interval tests, the M3-M10, 4th-5th, and m3-M6 tests were presented as suitable octave tests in the temperament section. In all cases, the beats will be similar for the various tests. The M3-M6 test was presented as a test for the wide 4th, and the m3-M3 test was presented as a test for the narrow 5th. In both cases the difference between the beat rates should be about one beat per second, the Major Third slower in both cases.

As other comparative tests, the inside M3-outside M6 (G3-B3, F3-D4) test was said to be similar beating, contiguous Major 3rds (C3-E3, E3-G♯3) vary in speed by approximately 2 bps, and minor 3rds beat similarly to Major 3rds a whole step above the upper note of the minor third (F3-G♯3, A♯3-D4).

The point was made that as more and more intervals become present for comparison, the whole arrangement of intervals fits together like a jigsaw puzzle. Understanding these basic principles, however, prevents the whole process from being itself a puzzle.

The Comma of Pythagoras was explained. This comma is the difference in pitch between the tuning of seven pure octaves and twelve pure fifths. By transposing some of the fifths downward into fourths, creating a circle of fifths, this comma can be demonstrated within the scope of one octave. The procedure would be as follows:

1. Tune C4 to fork
2. Tune C3 to C4 (Octave)
3. Tune G3 to C3 (Fifth, pure)
4. Tune D3 to G3 (Fourth, pure)
5. Tune A3 to D3 (Fifth, pure)
6. Tune E3 to A3 (Fourth, pure)
7. Tune B3 to E3 (Fifth, pure)
8. Tune F♯o3 to B3 (Fourth, pure)
9. Tune C♯3 to F♯3 (Fourth, pure)
10. Tune G♯3 to C♯3 (Fifth, pure)
11. Tune D♯3 to G♯3 (Fourth, pure)
12. Tune A♯3 to D♯3 (Fifth, pure)
13. Tune F3 to A♯3 (Fourth, pure)
14. Tune C4 to F3 (Fifth. pure)

As you may have noticed, C4 has been tuned twice. Use a different string of the unison each time. The difference between the the two unisons of C4 is the comma. Getting rid of this comma was the reason for tempering these intervals.

The next portion of the class is very interesting, as it never happens the same twice. With the above background laid, members of the class are asked to particpate by tuning a note in the temperament. (Reference was made to this class in the June '88 *Journal*). This whole process defies a given system for the tuning of equal temperament, as you have no idea what the person before you will have tuned, or from what note, etc. It is interesting that in all the classes which I have attended, a suitable temperament was achieved by the end of the class. This leads me to the conclusion that it does not matter how one gets there, so long as one winds up in the correct place. The class participation is a very interesting aspect of this class. It demonstrates that there are lots of ways to accomplish something when the end goal is clearly defined.

**Learning To Listen**

There were three tuning related classes offered. Excerpts of the tuning-related material are offered here. Some of the material is also technical in nature, but it all ties together. The first class was "Learning to Listen" taught by Joel Rappaport. This was a 1 1/2 hour class taught three times during the convention. The class dealt with the special needs of tuning for a concert or concert artist. The point was made that in addition to time management, people management was also a factor. Instead of the tuner and artist competing, everyone needs to be working toward the same goal. This often means being agreeable, and not defensive.

Some special needs of concert instruments were listed. These were 1) Repetition of the action, 2) Solid tuning of unisons, 3) Power, 4) Projection, and 5) Range of Volume. The piano must not be an obstacle to the artist's performance. This includes the way the action plays, the tuning, and the voicing.

It was suggested that the piano be touched up before the concert, and that the technician be available, or "on call" during the performance. If the artist requests that the character of the instrument be changed, permission from the owner of the instrument as well as money to perform such operations should be secured before anything is changed.

When tuning for a concert, it is important not to change anything drastically. This includes the voicing, and the pitch of the piano. What is of primary importance is the solid tuning of unisons. Nothing will destroy a performance faster than out-of-tune unisons. Good tuning of double and single octaves is also important in concert tuning. When tuning, it is important to move the pins as little as possible. Solid tuning is achieved by setting the pin correctly and solidly, and at the same time settling the string with firm blows.

After the piano has been tuned, make sure there are no blocking

notes and that there is sufficient aftertouch. Take care of any minor voicing problems. Noises such as the string barely being hit by the edge of the hammer, or the hammer not hitting all three strings at the same time should be taken care of well ahead of concert time. If possible, it was suggested that a final tuning check be made after the lights have been turned on and the piano has adjusted to this new temperature, just before the concert. It must be emphasized, however, that only the most minor of adjustments should be made at this time.

It was suggested that the following items be checked just prior to leaving the instrument before the concert: 1) Make sure the pedal lyre is secure, 2) Make sure the pedals are working, 3) Make sure the keyslip is in place, and that the keys do not bind against it, 4) Make sure that the legs are secure, 5) Make sure that the lid is in the proper position, and 6) Make sure the music rack is in if the artist wants it in, or out if the artist wants it out.

Various artist-technician situations were presented, with possible solutions for each. To re-emphasize, the most important point to be made in regard to tuning was the need for solid unisons. I could not agree more.

**Please Speak Up — I Can't Hear You**

The next tuning related class was "Please Speak Up — I Can't Hear You" taught by Dr. Barbara A. Bohne and Dr. William W. Clark. This was a 1 1/2-hour class taught twice during the week. My schedule prevented me from seeing this class in its entirety, which was my loss. It was very well presented, and explained how and why hearing deteriorates with age and exposure to noise. Our ears are such a vital part of our business, that it is our obligation to protect them. Several studies were presented which showed the results of listening to loud music, working in noisy environments, etc. The most important thing which I gathered was that exposure to noise does not always cause a hearing loss, but it does cause damage. This damage translates into a hearing loss later in life. Studies showing the effects of loud concerts was presented. People were tested both before and after the concert. It was interesting that while some showed temporary hearing losses at the time, most had fully recovered within a day or so. The startling fact was that the damage incurred was very permanent, and that the loss would be permanently suffered at some later date. For this reason, we should take utmost care to reduce noise levels to our ears while running shop equipment, flying in airplanes, using firearms, etc. Examples of noise reducing devices were shown, with their accompanying noise reduction rating. A chart was presented which showed how many decibels of noise varying devices create, and how many minutes of exposure at certain decibel levels were considered safe. New technology, such as digitally programmed hearing aids, were discussed. It was suggested that everyone have a regular hearing test, such as was given at the convention.

This is something which each of us needs to be aware, and I would encourage your participation in

classes of this nature, and the hearing tests, offered at future conventions.

### So You Want To Be A Concert Technician

The final tuning related class was "So You Want to Be a Concert Technician" taught by Norman Neblett. This was a 1-1/2 hour class offered three times during the convention. This class was counsel and advice to aspiring concert technicians based on Neblett's 30-plus years of experience in this field. Both the advantages and disadvantages were clearly spelled-out.

A brief history of the concert industry was given as a background for the loaning of pianos and endorsement by various artists. In addition, the class told of several snares to avoid, and gave an actual example of each. Issues such as making major changes before a concert, and artists selecting pianos were discussed.

Several aspects relating to tuning for a concert were set forth. One was that it is important for the piano to be stored in an air conditioned room, so that it will be stable when moved to the concert stage, which should also be air conditioned. The importance of humidity control was also emphasized. The issue of tuning with the lights on or off was raised. The point was made that the piano must be tuned while in a stable state. When the lights are turned on, the piano loses moisture and is therefore unstable. A piano should never be tuned when it is unstable. Since scheduling and budgets rarely permit the piano to sit under the lights for periods of time long enough to stablilize at the higher temperature, it is best to tune the piano with the lights off, while the piano is stable. When the lights go on, the tensions will change equally, and the piano has the best chance of staying in tune.

The most important aspect of concert tuning is unison tuning. The stability of unisons will make or break a concert by an artist, who is, after all, playing for the critical acclaim of the public. Stability is achieved by settling the string, not by turning the pin, and caution was given against a lot of up and down turning of the pin, as it leads to instability.

A discussion of octave tuning was presented. It was stated that most concert tuners tune double octaves in the treble, and that it is important for us to listen as well with our "musical ears" just as the artist does, before we are satisfied that are treble is tuned properly. The bass should be tuned with lots of stretch, such that there is a pronounced roll in the 17ths. There is a lot of music which ends with 17ths in the final chord, and this roll gives the piano a sort of vibrato, which the pianists like.

Caution was given against altering pitch very much. The piano must be in tune before you tune it. A concert piano is always in tune. If it goes out of tune during a concert, you stay afterward and tune it again so that it will stay in tune for the next concert. It was recommended that you have in writing the policy regarding the pitch of the instrument from the house or dealership. This will help prevent problems from artists who want the pitch of the instrument altered, without regard to the work involved to get the piano back to the proper pitch.

A checklist for unfamiliar and familiar pianos was given to be gone through before each concert. These included items such as making sure the lid hinge pins were in place, that the pedals function properly, that there were no leaking dampers, tight action centers, etc.

While we in this business look at position of concert technician as a position of glamour and prestige, Neblett cautions, "With prestige comes responsibility."

## Mini-Technical Review

The Mini-Technicals were 1/2-hour classes taught once during the convention. Of the five Mini-Technicals offered on tuning, three will be reviewed this month. The reviewer in each case is the instructor, who was asked to present a brief synopsis of the class.

### Pitch-Raising — Sid Stone

In this class, Sid Stone, of the Golden Gate Chapter, presented a list of twenty check points for determining whether or not to raise pitch on a given piano. The checklist was as follows:

1. Age of the piano
2. When the piano was last tuned
3. How far the pitch is below A-440 (Standard Pitch)
4. Pinblock Separation*
5. Pinblock vertical splits
6. Full or 3/4 plate
7. Plate crack*
8. Pins loose*
9. Pins/strings rusty
10. Pins pulled down
11. Upper bridge cracked*
12. Strings missing
13. Strings replaced
14. Strings tied
15. Strings rewound (number of coils)
16. Number of strings
17. Bridge cracks*
18. Separation of bridge cap*
19. Separation of bridge to apron*
20. Separation of bridge to soundboard*

For the above, all items marked "*" require that the proper repairs be made before the pitch is raised.

Next, eight different ways of raising pitch were discussed:

1. Normal tuning (pounding hard)
2. Setting a temperament, then tuning wide octaves
3. Tuning by octaves (all A's, then all D's, etc.)
4. (if 1/2 tone low) start with note #1, pull to #2, etc.
5. (if 1/2 tone low) use second piano, if available
6. (if 1/2 tone low) use tuning machine
7. Special procedure for antique pianos
8. Silent tuning (Pitch Raise in five minutes)

Finally, five items were presented for discussion:

1. Convincing the owner of the need to raise pitch
2. Whether or not to warn the customer of possible damage
3. What additional time and costs are involved
4. Preventing string breakage
5. How much above pitch to tune.

### Equal Temperament — William Stegeman

This Mini-Technical consisted of suggestions and demonstations on how to present and explain temperament and other aspects of music intonation to music educators, teachers, instrumental and vocal groups.

The first demonstration showed beats always occur when consonant intervals are not in perfect tune. Several 5ths, 4ths, M3rds, etc., were tuned pure, then de-tuned slightly to demonstrate the beat phenomena.

The next demonstration was to that three connected just Major Thirds fall short of a true octave by

approximately 1/2 semitone. For example, if just Major Thirds were tuned from C3-E3, E3-G♯3, and G♯3-C4, the C3-C4 octave would be flat by about 1/2 semitone.

The next demonstration was to that four connected just minor Thirds exceed a true octave by approximately 1/2 semitone. For example, if just minor thirds were tuned from C3-D♯3, D♯3-F♯3, F♯3-A3, and A3-C4, the C3-C4 octave would be sharp by about 1/2 semitone.

The final demonstration was to show how limited a Just Diatonic Scale is when using harmony. A number of just and tempered chords were then compared to show the need for temperament when using harmony.

Home-made electronic devices were used in the demonstrations.

**Tempering The Untemperable — Michael Kimbell**

In this Mini-Technical on Tempering the Untemperable, Michael Kimbell describes a method of dealing with inharmonicity jumps in some spinets and consoles, whereby the beat speed progression is interrupted momentarily at the point where the lower note of the third changes from wound to unwound strings.

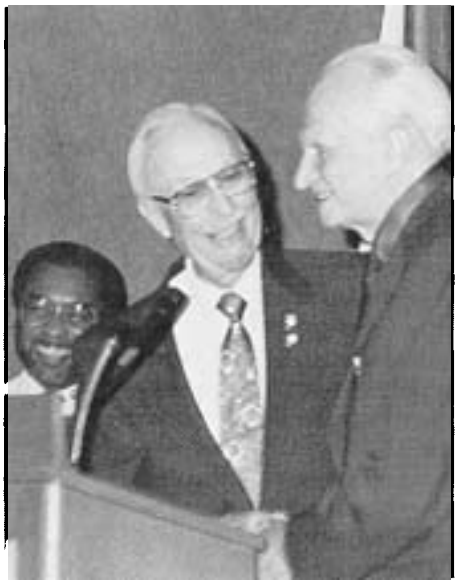
He also demonstrated a "rough-and-ready well temperament" for situations in which any semblance of equal temperament is a lost cause.

Both of these procedures will be described soon in a future *Journal* article.

The remaining Mini-Technical classes will be reviewed next month along with the remaining tuning classes. If you did not attend the convention this year, I am sure you can see that there was a great deal of information to be learned. I hope that these reviews were able to convey at least a part of what was there to be offered, and encourage you to attend the next convention.

Until next month, please send your comments and questions to:

**Rick Baldassin**
**2684 W. 220 North**
**Provo, UT 84601**



*1988 Golden Hammer winner George Defebaugh, center, is congratulated by former winner Stanley Oliver. Below, Roger Weisensteiner, left, receives Member of Note Award from incoming President Berry.*

# Letters

**Dear Friends and Colleagues:**

During my years of PTG activities I have received several awards including induction into the Hall of Fame during the Kansas City Convention in 1985. But this was IT! When I heard my name called for the Golden Hammer Award in St. Louis, I was so excited I jumped up and rushed to the podium without my cane! Last year my colleague, Jim Collins, sent me excerpts from an article called 'Happiness Is', which recently ran in Reader's Digest, and I would like to use a few of these words to put my relationship with PTG in proper perspective.

"In our subconscious minds we often see ourselves on a long and pleasant journey on a passenger train. The view from the window is most pleasant, but uppermost in one's mind is the final destination. On a certain day, at a certain time, we will pull into the Station. There will be bands playing and flags waving, and once we get there all our wonderful dreams will come true, all wishes will be fulfilled. We pace the aisles waiting, waiting, waiting for the Station. THIS IS IT! However, sooner or later we must realize there is no Station, no one place to arrive at once and for all. The true joy of life is the trip."

Since joining ASPT in 1954 and merging into PTG in 1958, I realize more and more each year what a wonderful trip this is. Teaching, learning, sharing treasured moments with good friends — that is what IT is all about. My wish is to be able to continue this special trip as long as possible.

In closing I would like to offer heartfelt thanks to each of you for your decision to award me this beautiful Golden Hammer, and especially to Bill Smith, a true artisan, for his many hours of handcrafting this magnificent case.

In the excitement of the event, I must not overlook another award that was presented as I stood at the podium clutching my precious Golden Hammer. Stanley Oliver was called to the microphone to present to me a beautiful walnut and brass plaque which said simply, "George Defebaugh, thank you noble spirit, teacher and friend." Visually impaired PTG members, I shall treasure this always."

**George Defebaugh**

# *Paris Becomes A Piano-Making Center*

**Jack Greenfield**
**Chicago Chapter**

## Parisians' Interest In Music

France followed the lead of England, Austria and Germany during the years from the middle 1760s to 1780 in abandoning the harpsichord for the piano. Most French musical activity was concentrated in Paris, a city with over 800,000 inhabitants, the highest city population of any in Europe. Politically and economically, France was in serious trouble. King Louis XVI, who succeeded his grandfather, Louis XV, in 1774, took over a country that was deep in debt after loss of its North American and Indian colonies to England in 1763. In spite of the heavy tax burden carried by the other classes but which the aristocrats and upper clergy were able to avoid, Paris continued as Europe's foremost center of music and other fine arts. Foreign musicians, singers and composers were welcomed to serve in performance at concerts, opera and private functions and in teaching. Paris provided a large market for music publishers who offered works of French composers as well as German and Austrian imports.

Hubbard reports that over 60 harpsichord makers worked in Paris during the 18th century before the harpsichord became obsolete in the final decades. The trade was controlled by rigid guild statutes that helped restrain competition. Except for sons who inherited their father's shops, beginners had to serve long apprenticeships without pay and then had to work as journeymen before acceptance as a master. Guild control began to weaken during the late '70s when the harpsichord began to decline before the advance of the piano.

## Use Of Piano Increases

Notices offering pianos in Paris, probably imported from Germany or Italy, first began to appear in 1759. As pianos became more common, Johann Gottfried Eckhard, a leading composer of keyboard music in Paris, published sonatas in 1763 and 1764 intended for pianoforte although offered for harpsichord also. After the importation of English square pianos began during the next few years, most buyers preferred them to instruments from Germany and Austria. The public debut of the piano in Paris occurred at a *Concerts spirituel* performance, one in an important series of public concerts that had been started in 1725. Mademoiselle Lechantre played an English piano, probably a square built by Zumpe. Gluck, who came from Vienna in 1773 to write for the Paris Opera, used a small piano made in England by Zumpe's competitor, Pohlman.

"

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## French Instrument Makers Start Building Pianos

Since Eckhard, Schobert and other prominent contemporary composers in Paris had come from Germany, it could be expected that more piano builders would have followed them there instead of going to London as Zumpe and other Germans did during the 1760's. It is likely that they chose London because there they would find no guild restrictions which would prevent them from opening their own shops.

The first Parisian instrument builder known to have made pianos is Johann Kilian Mercken. A square piano with his name and the date 1770 is the oldest surviving example of its kind built in Paris. In 1772, L'Epine, a prominent organ builder, obtained a patent for a piano action to be part of a piano-organ combination. During that year such an instrument was played at a *Concerts spirituel* performance.

It could have been the one built by L'Epine or by another maker working on such combinations.

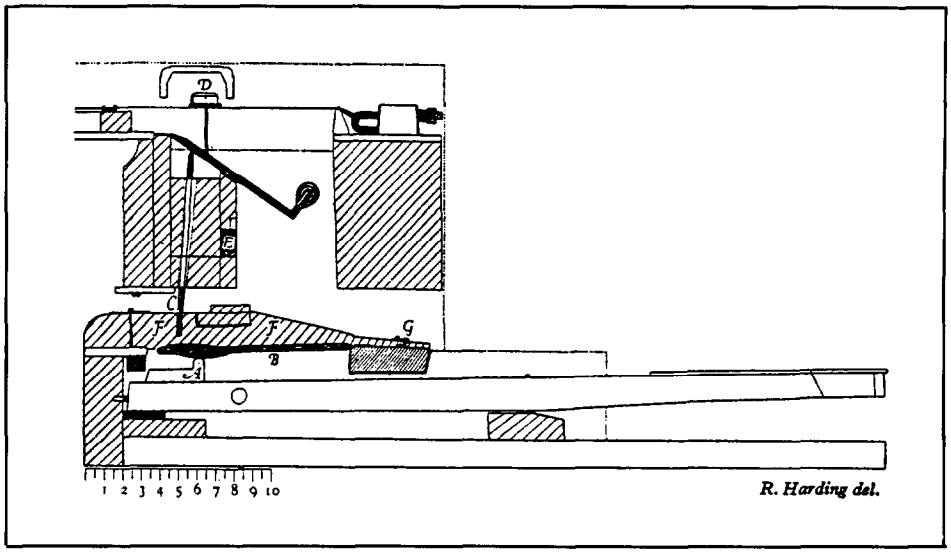
## Taskin's Pianos

With pianos increasing in popularity, harpsichord builders could no longer feel secure in their business and ignore the piano. The most prominent harpsichord builder of the period was Pascal Joseph Taskin (1723-1793), a Belgian assistant who had married the widow of Francois Etienne Blanchet II in 1766 and had then taken over the Blanchet family business. During their 80 years of operation the Blanchets had risen to become the leading suppliers of new and rebuilt harpsichords in France. Taskin continued the traditional excellent craftsmanship of the firm and built harpsichords considered by Hubbard to be among the best ever made in any country.

Soon after he began to direct the business he had acquired, Taskin took steps to increase the capabilities of the harpsichord for greater variety in timbre and dynamic shading. One change he made was the addition of another set of jacks with soft leather plectra giving softer pianissimo than possible with the conventional quills. In addition, to make it possible for players to shift registers rapidly without use of hands, Taskin designed a mechanism operated by knee-levers below the front edge of the keyboard. Six square knee-levers were linked by rods to shift any one of the four registers into playing position either alone or in combinations. Taskin's sophisticated instruments were judged the best for the compositions of French harpsichordists but the prospects for the sale of these expensive instruments for music that was becoming out-of-date were quite limited. In 1776, Taskin finally started building square pianos like those coming from England. A 1777 inventory shown by Hubbard indicates that Taskin had five square pianos in his shop then. It appears that Taskin's pianos were not successful and he made only a few. Of the only three still in existence, one in Paris is a square. Other pianos, one in Versailles and one in Berlin, are grands. The action in the instrument dated 1787 in Berlin is a hybrid design which can be classified as "Anglo-German" (shown by Harding). The hammers are hinged to a rail but rest with the heads toward the front. Long, thin intermediate levers which function as wippens are hinged to a lower rail to swing from the front in the direction opposite the movement of the hammer shanks. The back ends of the intermediate levers press up against long thin jacks attached directly to the lower hammer butt surfaces. At the back ends of the key levers, knobs on small wooden blocks used like modern capstans lift the back ends of the intermediate levers. The damper wires are also attached directly to the hammer shanks just above the jack attachments. Harding's drawing shows no escapement, back checks or regulating mechanism. Taskin's action appears slow, clumsy and impractical.

Since his own pianos were inferior, Taskin also became a dealer for pianos built by others. Broadwood records show a 1784 order from Taskin for four square pianos to be sent to King Louis XVI. The inventory of his shop after Taskin's death in 1793 (listed by Hubbard) shows 50 keyboard instruments. Among a total of 23 pianos, only four are identified as Taskin's. Eleven are shown as being built by English and other manufacturers, and eight are listed merely as "fortepianos."

Taskin did originate one practical idea found in modern pianos. He was the first builder to loop single strings around hitch pins for unisons instead of using separate strings. His arrangement for replacing tuning pins, however,was less satisfactory. He used hooks held horizontally in a thick strip of wood. The straight stems of the




**"The King," says the proclamation: "informed that Master Erard, by a new method of his own invention, has succeeded in improving the construction of the instrument named the fortépiano, that he has even obtained preference over those manufactured in England, in which there is quite a traffic in Paris . . . and wishing to honor him for contributing to the useful and the agreeable arts, has permitted him to manufacture, have manufactured, and to tell fortépianos in Paris, its suburbs, or anywhere he pleases . . ."** *Proclamation by King Louis XVI authorizing Erard to continue manufacture of pianos (translation by Loesser)*

hooks that passed through the strip were threaded on the fronts ends that projected for nuts that could turned to adjust tension of the strings caught on the curved hook ends.

## Erard's Start As An Instrument Maker

The builder who provided technological leadership first for the French, and then for the entire piano industry was Sebastien Erard (1752-1831), with assistance from his brother, Jean Baptiste (1745-1826), and his nephew, Pierre (1796-1855). The son of a cabinet-maker in Strasbourg, young Sebastien showed many talents with unusual aptitude for mechanics, drawing and geometry. He came to Paris in 1768 to seek employment. Soon after arrival he dropped the "h" from the Erhard family name. It is possible that previous experience or other association with the Silbermann family of instrument builders in Strasbourg may have influenced his decision to begin an apprenticeship to a harpsichord builder in Paris.

Sebastien learned his trade quickly. Eager to advance, he asked many questions — too many for his first master who discharged him for his inquisitiveness. Sebastien soon found another employer who had greater appreciation for the young apprentice's extraordinary ability. His work on a harpsichord for the Duchess de Villeroi established Sebastien's reputation for excellence. This led to sponsorship by the Duchess who provided him rooms for a workshop and living quarters in her chateau. Working by himself, in 1777 he built his first piano here, a copy of a Zumpe square. He continued to build more of them after friends of the Duchess heard the piano and began to order pianos for themselves. As the number of orders continued to rise, Erard found he needed more space and assistance. It was time for him to move. He proceeded to open a shop of his own in Paris and asked his brother to come join him as a partner.

Erard square pianos made in the early years of the firm were copies of the Zumpe design with the Zumpe single action. Other builders made similar instruments but original Zumpes had more prestige in France as well as in England. In time, however, the superior workmanship of Erard pianos raised their esteem in the minds of the French public. As sales of Erard pianos continued to increase, other firms that imported English pianos for resale became alarmed. To halt the threatened loss of business, they tried to stop the Erards by invoking old guild regulations. Sebastien fought his competitor's attempts and with the help of his influential aristocratic friends he received authorization from the King to continue.

## More Piano Shops Established In Paris

Interest in the harpsichord dropped rapidly after 1780. Public advertisements appeared offering harpsichords in exchange for other instruments or object, or for sale at low prices. Pianos were being played more frequently in private as well as in public. At a 1786 *Concerts spiritual* performance, 11 different pianists played piano solos. Harpsichord builders who did not make pianos dropped out of business. From several dozen earlier in the 80s, the number of harpsichord builders listed in a contemporary reference had dropped to only five in

1791. Guild restrictions were no longer effective and some of the new instrument makers now building pianos in Paris were recent arrivals from Germany.

## Erard Establishes A Branch In London

With competition in Paris growing, Sebastian Erard took steps to expand by setting up a branch in London. He may have left also because he anticipated personal danger if he remained in Paris. France was on the brink of revolution and his friendship and past association with members of the aristocracy could have caused him trouble. He departed in 1786, leaving his brother Jean Baptiste to manage the Paris shop. Sebastien began manufacturing operations soon after his arrival in London. English interest in the piano was rising rapidly and the excellent craftsmanship of the Erard pianos assured their acceptance. While running his successful business, Erard also increased his skill and knowledge by what he learned through his association with other builders in London, among them Broadwood.

After several years in England, Erard began to work on improvements in design. His earliest pianos had been copies of Zumpe's single action square piano. In 1790, he adopted the Zumpe second or double action although more builders were changing to the Geib double action. Erard also developed some original mechanisms he patented. One was an action shift for hammers to strike one, two or three strings of a trichord. Another was a "Harmonic Sounds" device with which wire-mounted felt tips were brought into light contact with strings at the middle points to sound the octave partials.

## Effects Of The French Revolution

During the Revolution, musical activity was reduced but not stopped. Regular opera performances and public concerts continued and segments of the population not directly involved in the conflict continued to play the piano and take piano lessons. There was some concern, however, over the loss of support for music by patronage of the aristocracy. When the National Convention met in 1792 to form a new constitution, they decided to provide new support by establishing a National Institute of Music, later known as the *Conservatoire*. The faculty was authorized to confiscate from condemned aristocrats "the best musical instruments for use of the Institute." An inventory of keyboard instruments collected after 15 months shows the relative numbers in use. The total for harpsichords was 63, over one-third from 40 to 150 years old. There were 20 French makes among the 64 pianos with most of the rest English. Twelve of the French pianos were built by Erard and 16 of the English pianos were built by Zumpe or his successor, Schoene. Subsequently, the French piano trade was given new assistance by passage of French laws in 1793 and 1795 restricting and then forbidding imports of British origin.

## Sebastien Erard's Return To Paris

After the Constitution of 1795 had restored order, Sebastien returned to France, leaving the Erard branch in England to continue in operation under a manager for the firm. Pianos were manufactured here until 1890. Using factory methods of production Sebastien had learned in England, the Erard shop in Paris, enlarged after his return, started manufacturing large numbers of square and grand pianos. The first grands contained a modified form of the English grand action. Sebastien also experimented with Viennese actions but found them less satisfactory. An existing grand he built for Beethoven has an English grand action. Another Erard piano, a grand for Napoleon, contains a Viennese action. Erard also made a grand piano for Haydn, but this one has disappeared.

Until the early 1800's, Erard had followed established designs with relatively small modifications. In his later years he worked on more advanced original ideas. He conceived and patented a large number of drastic changes in piano structure and actions. This led to his greatest achievement, the Erard repetition action patented in 1821, which is the basis for the modern grand action. ■

# *Summer NAMM Report*

**Susan Graham**
**Technical Editor**

It is accurate and healthy to regard the piano market as becoming specialized, rather than simply dying. Technicians need to keep informed about industry developments to be effective as a working cog in the whole. Granted, our "working" seems more real to us than does sales or marketing. We are responsible for solving the problems of the piano-playing public, and so are most concerned with technical matters. However, the broader our base of information, the better we can do our job not only as technicians but as counselors and advocates for our customers.

For that reason, I did a fairly extensive report on the January NAMM show. When the June show in Atlanta rolled around, I was curious to see what changes occur in the industry in six months, and to see whether regular attendance would be necessary to keep current. (I was also curious to see if the show would be less overwhelming a second time around.) My conclusion is that changes do occur, but slowly; extensive biannual reports do not seem necessary. This magazine will continue to report industry news as it occurs throughout the year, however.

A further conclusion was a reinforcement of my original observation: the NAMM show is too enormous an event to cover completely. Due to the size, and emphasis on marketing, it is not the venue in which to judge pianos fairly. There are extenuating circumstances which conspire against everyone; for instance, the lovely Atlanta climate. During set-up, I descended to the lowest floor of the Georgia World Congress Center, and found myself in piano tuners' hell. The outside temperature was 105 degrees; downstairs it was well over that, and humid enough to steam-remove key bushings. Nevertheless, pianos were being tuned — southern technicians are a tough bunch. That night the air conditioning turned on, and virtually every piano in the place promptly went flat. Were I a paranoid person, I'd suspect a plot arising from the electronic keyboard segment...

Too many pianos and none of them in really outstanding condition, called for some narrowing of scope. As I wandered the hall it seemed that large vertical pianos were more in evidence than ever. Almost everyone makes a 45-inch studio; sales people tell me that these and the larger uprights are increasingly popular. This suggested a way to compare apples to apples, to give an overview of trends and a more fair basis of comparison from brand to brand. "Big verticals" became the focus of this report.

Evidence of the trend toward the

larger piano was the fact that Kimball showed no spinets. Their 46-inch studio is a noticeably improved piano, with a solid Sitka spruce board, three bridges and the Langer BP action built by Herrburger Brooks, featuring the auxiliary jack-control spring extending from the catcher. This action is functioning well, although spring tension and checking distance must be correctly regulated for backchecking to be reliable (spring regulating tools are being distributed to technicians at conventions and seminars). Tone was well balanced throughout the registers. Improvements coming from this company are an encouraging sign for the American piano industry.

The continuing efforts of the Sohmer Company are also encouraging. As a company in a state of re-building and reorganizing, they are experimenting in a variety of ways. For instance, the Sohmer U-10 vertical uses a Pratt-Win action, constructed to their specifications (top quality buckskin and bushing cloth). These were side-by-side with two Mason & Hamlin 52-inch verticals, one with a Pratt-Win action and another with a Herrburger Brooks. They were three very different pianos: even though the two Mason & Hamlins were weighed off to identical touchweight specifications, for instance, the Pratt-Win had a noticeably "heavier" feel. The company is also experimenting with a "polyester-type" finish which can be sprayed with standard equipment and touched up in the traditional manner. They have up to a one-year backorder: one concern right now is just getting units out.

Other small companies were present. The Charles R. Walter company showed a variety of consoles and studio pianos. Charlie Walter's engineering background is evident in features such as grand-shaped harmonic traps on the soundboard, a reinforcing brace under the treble bridge where it is notched for the plate strut, true notching (not just bevelling) on both sides of both bridges, and bearing "rods" which enables them to use a precut bridge and adjust the bearing to the individual plates. The pianos use a Langer 80 action and keys from Herrburger Brooks. The actions were on the loose side — perhaps a climate reaction — and the tone was quite bright.

Sherlock-Manning, from Canada, was showing a new 45-inch piano which combines the old Heitzmann and Sherlock-Manning scales. They use a solid spruce board, ribs notched into the case, Pratt-Win keys and action and Standard hammers. They also market a separate line of high-quality benches.

Wurlitzer is a company in transition. Now owned by Baldwin, they make 45-inch pianos in both the Wurlitzer and Chickering lines, and have a 48-inch made for them by Young Chang. They are working particularly hard to improve their hammers, and more care is going into voicing — they now use a "standard" piano for comparison by the voicers. The verticals on display had a lot of sound but were somewhat uneven — the 45-inch pianos were generally more pleasing than the 48.

Although not in the vertical category, it should be mentioned that this show marked the official introduction of the Falcone piano to the NAMM crowd. Santi Falcone made the wise move of renting a quiet room upstairs; the pianos attracted a great deal of attention and appreciation. The company makes 6'1", 7'4" and 9' grands, and is producing 200 units a year (prices range roughly 22K-45K). They use Renner-made hammers and action parts, and Kluge keys. It is no secret that many features are similar to some more familiar designs in the industry, but it is also evident what quality of workmanship can do. The actions felt wonderful — voicing seemed a little uneven but there were so many pianists taking advantage of the concert-hall atmosphere it was difficult to make a fair evaluation.

As usual, Steinway was sequestered in a suite in a hotel several blocks away. They did briefly display the commemorative piano about which we have heard and read so much. Knowing I would have another chance to see it in St. Louis I decided to continue devoting my time to the more accessible instruments present in the exhibition hall.

Our old friend the Hamilton studio was redesigned by Del Fandrich several years ago. Baldwin is up to full production on this model, which has a new stringing scale, new bridge design and a radial rib pattern. The plate has been stiffened and the pinblock design changed to improve tuning stability. I couldn't judge the stability under the circumstances, but the piano has a smoother bass/tenor break and puts out a lot of sound. Baldwin's big upright, the 6000, remains the same: the models shown had a less agressive tone than the Hamiltons; actions in this larger piano had a pleasant "weight" to them.

Also using a Pratt-Win action are the Everett pianos built by Yamaha in Georgia. The stringing scales on these pianos have been cleaned up, reflected in better sound. They continue to manufacture a variety of large uprights (under the Yamaha name), in 45-inch, 48-inch and 52-inch. They are consistent and reliable instruments, characteristic of what we expect from this company. The vertical Disklavier features all the MIDI capabilities of the grand described in the January report, and adds the benefit of playback through the actual piano. It is a wonder to behold and play (it also happens to be quite impressive simply as a good upright piano — and at around 9K, not an outrageously expensive purchase). The company sees the MIDI system linking acoustic and electronic music as a potential savior of the piano, not as its enemy. As Bill Brandom puts it, a performance on electronic instruments comes across as a statement of technology; combined with an acoustic piano it once again becomes a statement of art.

Kawai is, to coin a phrase, heavy in the vertical market, with 45-, 46-, 48-, 49-, 50-, and 52-inch pianos. They all demonstrate simple good piano construction. The largest of these includes two extra strings at the lower end of the bass. These strings are damped: reinforcing of the bass occurs when the pedal is engaged. They also function as do extra bass strings in other pianos: to extend the bass bridge and soundboard to enhance the resonance of the normal range

of the bass. Ray Chandler suggests tuning these two strings to a pitch determined by rapping on the bridge to detect its resonant frequency.

The substantial air of tradition which is much a part of the appeal of the piano was well represented by the European imports. This was my first time to see the W. Hoffman line, manufactured in Langlau, W. Germany by Feurich and imported by Nedim International, Patchogue, New York. On display were two grands with a particularly pleasing treble. Verticals are made in sizes ranging from 44 to 49 inches; the pianos have Renner hammers and actions. High quality work, including cabinet design and manufacture, is emphasized. Their representative, Peter Hooglander, reported a lot of interest in the product. Prices of imports may change dramatically, but at this writing the verticals range from 4,600-8,000 wholesale and the grands from 14-21K.

The Seiler company included a number of vertical pianos in their display. They too make a range of large uprights — 45, 46 1/2, 48 and 50 1/2 inches. Actions are made to their design by Renner; they use Renner hammers which they preneedle before installation. Hammers which become too soft are returned (not just soaked in lacquer and used anyway...). Their technical representative, Peter Deutz, points out that the action in the 50 1/2-inch model is a larger action designed for that piano, not just a raised compact action. The channel steel reinforcement of the keybed/action support brackets is an interesting example of the concern for detail in these pianos. Once again, care in case work is evident.

Schimmel introduced a new 52-inch vertical, developed in tandem with a new 6'9" grand. It has a tapered soundboard and a very heavy solid-spruce back construction with extra blocks of wood at the treble end to increase carrying power. The model shown had a good bass and pleasing treble, with the somewhat "hollow" quality in the tenor which seems to accompany a smooth break. It uses the same full-size Renner- made action which is in the 47-inch piano. An example of their attention to detail is the key in the vertical pianos, which has a lamination of Canadian maple between two layers of spruce. Their publication "From the Musical Bow to the Piano" (available through dealers) is a beautiful and informative history of the piano.

Another European import is the Czechoslovakian-made Petrof. These are a bargain — the 50-inch vertical retails for around $3,200. Dave Postma, whom many of us know as a technician, cautions that they do need some detailing upon arrival, but he is pleased with the performance of both the grands and uprights. The verticals have agraffe terminations throughout the piano; they use both Renner and Czech-made hammers, finding the latter produce a mellower tone. Verticals are available in 50, 45 and 41 inches; the largest had a particularly nice tone and action. Petrof uses cashmere in their action center bushing cloth....!

The Bechstein display featured grand pianos, including an 1863 seven foot which was used by Liszt. It is straight-strung, with a substantial, removable capo bar, and cross members between the plate struts. Restrung and containing new Abel hammers, it has the sweet tone one would expect from such a period piece. The display included a 52-inch vertical, built in the classic European style with full agraffes and an exposed pinblock: a high quality, pleasant and expensive ($25,000) piano.

Similar in tone and price is the Boesendorfer 130 mm. vertical. Clearly, these uprights are not aimed at those who cannot afford a grand. They fill a place for those whose space is limited, or who are purchasing a second piano and want the quality that such names offer.

As explained in the January report, Schiedmayer, Diapason, Zimmermann and August Foerster are all imported by Performance Pianos of Houston. Ibach owns the names: the Schiedmayer and Diapason are made by Kawai (to distinct specifications and designs — they are not stencil Kawais). The pianos could be characterized as solid and reliable.

There are brands for which the name gives little clue to the current country of origin — and there are those which come from different sources at different times. For instance, the Schumann name includes studio size pianos made for them by Samick, and consoles and a very small grand made by Kimball. These are "designer market" pianos, available in a variety of cases with a not particularly exciting piano inside. The Dietman/Otto Bach company has subassembly in Texas, with components coming from such diverse locations as Germany, South Africa and Denmark. The Weber name is now owned by Samsung, but the pianos are manufactured for them by Young Chang.

Schafer & Sons imports products from seven different factories. Their much-promoted lifetime guarantee is contingent upon the piano being tuned every year by a technician either from or preapproved by the dealer. The technician is responsible for any problems which develop between tunings, however. Given the tendency of climates to shift and the variety of sources that these pianos come from, this guarantee seems less beneficial to the technician (and the customer) than it originally appears.

If a generalization were to be made, it would be that the quality of the Korean imports is improving, just as many of us suspected it might. In particular, Samick and Young Chang both show signs of hard work, developing better prod-

ucts and improving those already on the market.

Samick makes a 46 1/2-, 48- and 52-inch models; both the 46 1/2 and 52 had a good bass with a pleasant "stringy" quality (as in cello) and responsive actions.

The Young Chang actions are also good — it is as if we can see the factory personnel developing the ability to understand a piano action, not just adjust it to specification. Pianos at the show have seemed less bright than I expect - sometimes almost subdued — but well balanced. They make 46, 48 and 52 in the "big upright" category. I still prefer the 48 inch for overall tone production. Expect some developments in the grand market from this company - we may even see something new in St. Louis.

Sojin has a new German-designed scale in their 48- and 52-inch verticals (they also make a 45 inch and a 47 inch). They have a clean, bright treble but a noticeable "thud" in the bass. All the verticals use the same size hammer (which are Royal George felt), which may account for the subdued quality of the bigger models. In general, the pianos are bright and somewhat abrupt in tone.

Hyundai's entry into the American piano market began three years ago, although they have been making pianos for some time. They use Samick-made actions, which felt smooth and quite stiff, and the tone was, again, somewhat subdued.

The Pearl River company from Ghangzhou, China, was at this show, although due to shipping difficulties they did not have the display they intended. Emily Moerdomo, president of the importing company, reports continued high interest in the product.

What struck me in looking at all these pianos was the tremendous difference — not just in tone and appearance, which was expected — but in the actions. With more experience working on grands, my tendency has been to regard all vertical actions as essentially the same, and I was quite surprised by the pronounced differences that even my primitive piano playing could detect. The more expensive pianos are consistent within their line — the moderate and inexpensive lines show a lot of variation from piano to piano. This reinforces the wisdom we impart to our customers: try out a particular piano, and if you like it, be sure you get *that* piano. It also demonstrated that good pianos are good pianos, and that the good verticals, particularly the larger ones, have a lot to offer.

AND, IN CONCLUSION...(a little "bullet press")

What I would have looked at if I had more time: Yamaha's new C7 grand, now 7'6" with a higher tension scale, more soundboard area and a "suspended" plate... the new 9-foot Kimball concert grand (introduced as part of an elegantly lavish evening of entertainment featuring Marvin Hamlisch), a joint Boesendorfer/Kimball product; same wippen as the Boesendorfer but built by Herrburger Brooks; leather key bushings, Renner hammers — a very nice piano with a rather Viennese price (wholesale around 35 K)....

Interesting to see ....Kurzweil set up at the end of the piano hall (affectionately referred to by the rest of the show as "the morgue"), clearly going after the home market: interesting but a little bizarre to watch their demonstrations, with an artist cooking away and the audience grooving - everybody wearing headphones and not a hemidemisemiquaver let loose into the atmosphere....yet another space-age piano, a clear lucite Seiler MIDI grand, ... Pianodisc, a retrofit "player" system which runs off a floppy disc ...

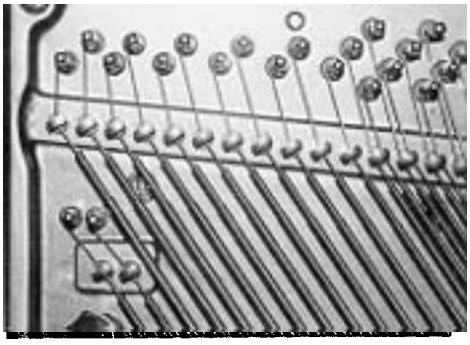
Rumors abound that the summer show is due to be discontinued in favor of one big blast in Anaheim each January (a good idea as far as I'm concerned) ...Roscoe, the Stair Climbing Piano Dolly, is still moving the same piano up the same stairs (I know just how he feels...). A big thanks to Ed Whitting and Young Chang for an impressive keyboard backdrop for the PTG booth, and thanks to the hardy souls who "manned" the booth (sorry, Christie)...

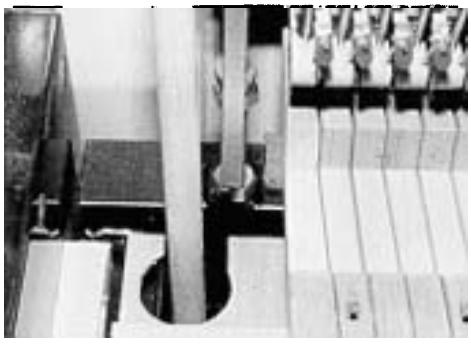
And the summer '88 NAMM is history. ■



# *NAMM Show*

*(Clockwise from top photos) Most of the piano exhibits were located in a separate hall. Extra bass strings in the Kawai US75. Capo bar of the 1873 seven-foot Bechstein used by Liszt. Hard at work in the PTG booth loaned to the Guild by Ed Whitting of Young Chang. "Roscoe" kept climbing. Full-agraffe, exposed pin-block construction of the Bechstein vertical. Keybed/action bracket reinforcement in the Seiler verticals. An example of casework typical of the Sohmer.*



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# Calendar Of Coming Events

| Date | Event |
|---|---|
| **September 10, 1988** | **2nd Annual Maine Chapter Lobster Bake**<br>Pemaquid Point Lighthouse<br>Paul Rice; H.C. 31, Box 84; Bath, ME 04530; (207) 443-3372 |
| **Sept. 30-Oct. 2, 1988** | **Florida State Seminar**<br>The Jacksonville Hotel, Jacksonville, FL<br>John Pelick Jr.; 1567 Townsend Blvd; Jacksonville, FL 32211-4944; (904) 724-4795 |
| **October 7-9, 1988** | **Ohio State Conference**<br>Rodeway Inn, Columbus<br>Kim Fippin; 37 University St.; Westerville, OH 43081; (614) 890-2197 |
| **October 14-16, 1988** | **Texas State Seminar**<br>El Tropicana, San Antonio<br>Leonard Childs; 7867 Lark Ridge; San Antonio, TX 78250; (512) 647-3648 |
| **October 19, 1988** | **Baltimore Annual One Day with Susan Graham**<br>Omni Hotel, Baltimore<br>Christie Cornetta; 10 Draw Bridge Ct.; Baltimore, MD 21228 |
| **October 20-23, 1988** | **New York State Seminar**<br>Quality Inn North, Syracuse<br>Arthur Nick Smith; 730 Park Avenue; Syracuse, NY 13204; (315) 478-1669 |
| **October 28-30, 1988** | **Central East Regional Conference**<br>Sheraton Inn, Normal, IL<br>Robert Morris; 1729 D Valley Road; Champaign, IL 61820; (217) 356-9781 |
| **November 4-6, 1988** | **North Carolina State Seminar**<br>Comfort Inn<br>Sam Corbett; Rt. 3, Box 115; Grifton, NC 28530; (919) 524-5016 |
| **July 10-14, 1989** | **32nd Annual Piano Technicians Guild Convention & Institute**<br>Red Lion Lloyd Center, Portland, OR<br>Home Office; 9140 Ward Parkway; Kansas City, MO 64114; (816) 444-3500 |

**Membership!**

# *Dues Billing Near; Deadlines Moved Up*

**Nolan P. Zeringue**
**Vice President**

The time to pay our dues is upon us again. Our PTG dues come due January first of every year. Notices go out early in November so this gives us time to make arrangements to pay our dues before they become delinquent. For most of us it is only the cost of two or three extra tunings.

Paying on time helps to save money, your money. Your dues are the income which allows your organization to operate, and there is always additional cost to send second and third notices in order to collect dues. Some years as we go into March there are as many as 300 to 400 members who have not paid their dues. This involves much extra expense in mailings and phone calls to see if the members wish to continue their membership.

In many cases the members who have not paid their dues have not contacted the Home Office or their Regional Vice President. If you are having some problems with paying your dues on time, please call your RVP and let him or her know of your problem. The RVP in your region has the authority for any special handling which might be needed in your case. Once the drop date has passed, the Home Office has no authority to handle your dues payment, and you must contact your RVP.

Be aware of this year's Council action which changes the dates for dropping members' names from the rolls of PTG for non-payment of dues. Members who have not paid their dues by January 31st will be considered delinquent and will receive no other *Journals*. The drop date will no longer be at at the end of April of each year.

Our bylaws also contain provisions for members who are unable to pay and also for our senior members. I'll write about those in another article.

# *New Members During July 1988*

**REGION 1**

*Montreal, QC — 060*

Jean Real Goulet
2584 Prefontaine
Longueuil, QC J4K 3Y5
Canada

*Toronto, ON — 062*

William J. Barclay
133 Sophia Street
Peterborough, ON K9H 1E2
Canada

*Connecticut, CT — 064*

Debra U. Mason
473 North Main Street
Wallingford, CT 06492

*New Jersey, NJ — 078*

David L. Van Derveer
Five Taft Place
East Brunswick, NJ 08816

*Philadelphia, PA — 191*

Gerald B. Carter
1733 Manton Street
Philadelphia, PA 19146

Eric M. Fitzsimmons
2732 Sugan Road, #1
New Hope, PA 18938

**REGION 2**

*Hampton Roads, VA — 233*

Thomas J. Bulfer
520 West 22nd Street
Norfolk, VA 23517

*Charlotte, NC — 282*

Shaun Donaldson
5335 Parview Drive
Matthews, NC 28105

*Northwest Florida, FL — 325*

Timothy P. Hollis
4309 W. 19th Street
Panama City, FL 32405

*Sarasota-Ft. Myers, FL — 335*

Lynn L. Bethune
312 Rutgers
Fort Myers, FL 33936

*Nashville, TN — 372*

Michael G. Crow
2749 Trenton Road
Clarksville TN 37040

*Memphis, TN — 381*

Michael D. Anderson
PO Box 417
West Memphis, AR 72301

Waclaw J. Koneczny
510 Grahamwood Drive
Memphis, TN 38122

*Mississippi-Gulf Coast — 395*

A. Lynn Evans
RT. 2, Box 14A
Taylorsville, MS 39440

**REGION 3**

*Oklahoma, OK — 731*

Stepen P. Storm
2304 North Pottenger
Shawnee, OK 74801

*Houston, TX — 771*

Paul W. Underwood
1376 Woodcrest
Houston, TX 77222

**REGION 4**

*Lansing, MI — 489*

Shelley L. Vanderveen
2520 Tulane Drive
Lansing, MI 48912

*Waukegan, IL — 600*

Ed F. Richards
PO Box 541
Cary, IL 60013

**REGION 5**

*St. Louis, MO — 631*

H. Alan Irwin
719 Catalpa Avenue
Webster Groves, MO 63119

*Kansas City, MO — 641*

Ling C. Chen
1808 Locust, #1
Pittsburg, KS 66762

**REGION 6**

*Utah Valley, UT — 846*

Jon E. Tolman
Box 68
Castle Dale, UT 84513

*San Diego, CA — 921*

Don W. Faupel
1617 Madera Street
Lemon Grove, CA 92045

*Golden Gate, CA — 945*

Carolyn R. Lowery
1075 Palisade Street
Hayward, CA 94542

*Portland, OR — 971*

Larry D. Fisher
7409 N.E. 134th Ave.
Vancouver, WA 98682

Lori D. Russell
7103 Kentucky Drive
Vancouver, WA 98664

*Seattle, WA — 981*

William A. Mills
10024 S.E. 204th Street
Kent, WA 98031

Robert D. Samuelson
1101 17th Avenue, #206
Seattle, WA 98122

*Puget Sound, WA — 985*

John E. Nafie
PO Box 2306
Bremerton, WA 98310

# *Reclassifications*

**REGION 4**

*Indianapolis, IN — 461*

Robert S. Bussell
224 West Banta Road
Indianapolis, IN 46217

**REGION 5**

*Nebraska, NE — 683*

Allen R. Hansen
4315 Stoneridge Path
Grand Island, NE 68801

Joseph A. Swenson
2738 Wyoming
Omaha, NE 68112

| | 1988 | 1987 |
|---|---|---|
| Northeast Region | 825 | 751 |
| Northeast RTTs | 547 | 552 |
| Southeast Region | 575 | 542 |
| Southeast RTTs | 384 | 386 |
| South Central Region | 313 | 302 |
| South Central RTTs | 219 | 231 |
| Central East Region | 609 | 600 |
| Central East RTTs | 414 | 419 |
| Central West Region | 406 | 408 |
| Central West RTTs | 303 | 302 |
| Western Region | 863 | 864 |
| Western RTTs | 612 | 646 |
| Total Membership | 3,642 | 3,520 |
| Total RTTs | 2,479 | 2,536 |

# The Auxiliary Exchange

## From the President

The Annual International Convention of the Piano Technicians Guild Auxiliary in St. Louis is now a memory! It was a successful and well attended one and much thanks is due to our former president, Ginger Bryant. Those who were unable to attend our festivities must rely on the reports their friends will bring back to them. There was excitement and fun for all from the extensive motor tours about the city, the Botanical Gardens, Jefferson Museum to the riverboat luncheon on the Robert E. Lee. In addition there were three classes of instruction to assist the spouses' knowledge and insight of piano technology. We all salute Ginger for a job well done.

The "glow" of the beautiful Installation Luncheon and the program of the music student from the St. Louis Conservatory and Schools of the Arts will stay with us well into the fall. Our former officers have set standards and style that the current Board will strive to achieve and continue in the tradition of the Auxiliary.

**Agnes Huether**

## Thirty Years Growing

It was in July 1958 that our first president of the Piano Technicians Guild Auxiliary took office. Ruth Pollard of Houston, TX, and one of our esteemed honorary life members, took the helm of PTGA. During the ensuing 30 years, 16 "First Ladies" saw to it that the Auxiliary grew and flourished, developed new programs, worked at fund-raising activities to provide a bit of an assist to the growing "infant" Guild, and managed to make all the finance-promotion deals rewarding events. Many may recall our sales of the Norman Rockwell "Piano Tuner" print, the Cook Books, the Sun-Catchers, the Idea Books and our wonderful "Christmas in July," to name a few.

All of these former presidents can be proud of their achievements. May the next 30 years be successful and fun-filled.

**Agnes Huether, Editor**

*Aaron Topfer, left and Derison Duarte were all smiles after performing for the Auxiliary Tea Tuesday afternoon. The two St. Louis piano students received Auxiliary scholarships awarded through the Missouri Music Teachers Association.*

*Above, Auxillary program participants study their handwriting during Sue Mathias' presentation Thursday morning. Mathias, a master graphoanalyst, was only one of several guest speakers in an activity-filled week. At right, new Auxiliary board members posed for a photograph after the installation luncheon. They are, from left, Barbara Fandrich, treasurer; Judy White, corresponding secretary; Ginger Bryant, immediate past president; Agnes Huether, president; and Arlene Paetow, vice president. Not shown is Bert Sierota, recording secretary.*

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***Exchange Editor:***
Agnes Huether
34 Jacklin Court
Clifton, NJ 07012

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Clifton, NJ 07012

JUDY WHITE (Mrs. Charles)
*Corresponding Secretary*
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Alma Center, WI 54611

ARLENE PAETOW (Mrs. William)
*Vice President*
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High Falls, NY 12440

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

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## For Sale

**MAPLE KEY BUSHING CAULS** for two-caul method (bushing one side of mortise at a time) featured in August '88 Journal. Available for key pin sizes .087", .125", .131", .133", .137", .146", & .163". **Bill Spurlock, 3574 Cantelow Rd., Vacaville, CA 95688, (707) 448-4792.**

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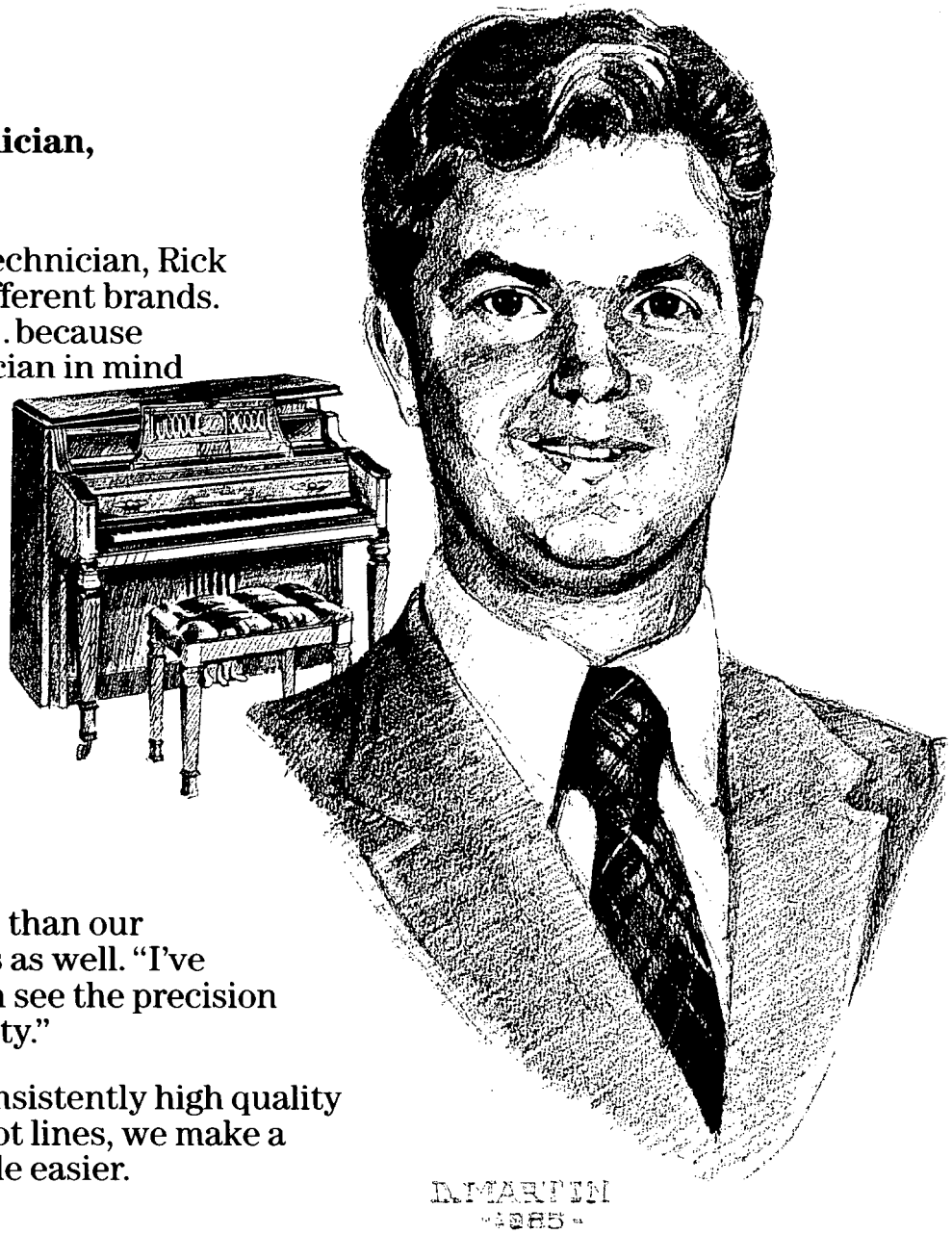


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