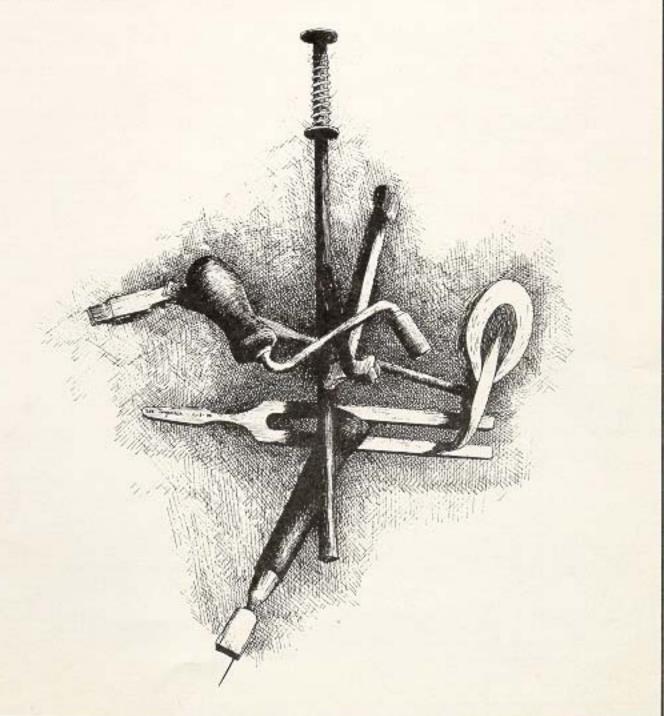
Piano Technicians Journal

February 1982



A Man and His Piano

Philippe Entremont and Bösendorfer

The gleaming Bösendorfer piano by Kimball which has dazzled audiences with its beauty and magnificent singing qualities now accompanies the dazzling French virtuoso, Philippe Entremont. The piano that was built to match the unique artistry of Liszt now will enjoy the sensitive performances of Entremont and together will delight audiences throughout the world. But delighting audiences is not new for Bösendorfer, the choice of the masters, Wagner, Brahms and Strauss: neither is the exceptional standard of quality it sets. Bösendorfer today is still handcrafted by perfectionists in Vienna, Austria. The craftsman's skills are the integral part of the creation of Bösendorfer that separates this masterpiece from anything ordinary. Each mechanism takes over a year to complete. The lumber used on the pianos is seasoned outdoors from three to four years. The additional width of the Imperial Grand piano (it has nine additional keys), enables the entire lower range to have extraordinary resonance. The piano's exceptional singing capability allows each chord a clarity and distinctness throughout every performance, not usually associated with an ordinary Concert Grand. In a world of ordinary things, the Bösendorfer piano by Kimball stands out as an extraordinary achievement. If you would like to learn more about Kimball's Bösendorfer, contact James Birk, Kimball International, Inc., 1549 Royal St., Jasper, IN 47546.

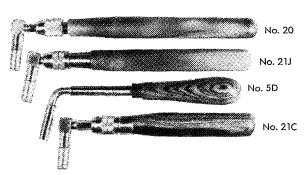
Philippe Entremont, the music director and principal conductor of the Vienna Chamber Orchestra playing the 9'6' Bösendorfer Imperial Grand piano, the official piano of the Vienna Chamber Orchestra.



The piano that sets the standard of the world.

A Division of Kimball International, Inc.
1549 Royal St., Jasper, IN 47546 812/482-1600

SCHAFF'S NEW TOOL EXPLOSION



HARDWOOD EXTENSION TUNING LEVER — Medium priced lever that measures 13" overall, having a 912" wood handle. Chrome plated hexagon shaft extends to 18" long. Comes with our 1112" long No. 13B Head and No. 14B #2 Star Tip. Lever weighs 14 oz.

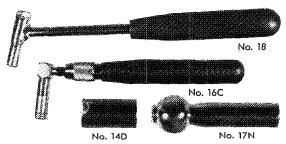
No. 20 – Wood Extension Lever. Each Net \$25.00

STATIONARY ROSEWOOD TUNING LEVER—This lever is modeled after the Yamaha type in design appearance. The overall length is $11\frac{1}{2}$ " which includes an 8" rosewood handle. Comes with a stainless steel collar and tuning head (our No. 13B) and No. 14B #2 Star tip. Net weight I pound. No. 21J—Stationary Rosewood Tuning Lever. Each Net. \$29.00

EUROPEAN TUNING LEVER—Imported from England to be used on 1/0 tuning pins that are in European pianos. Lever is all one piece measuring 1092^m long with a 5^m high gloss finish, hardwood handle. Shaft and head are polished steel. Choose from a star tip or square head. Weighs 992 oz.

No. 5D—European Lever. Star Head. Each Net. \$25.00
No. 5E—European Lever. Square Head. Each Net. \$25.00

COMPACT, EXTENDABLE ROSEWOOD LEVER—Just like our famous Schaff No. 21 Lever as shown in the catalog, but it is much shorter, measuring only 10" overall with a 6" rosewood handle. Stainless steel hexagon shaft extends to 14½" long. Comes with No. 13B Head and No. 14B Tip. Weighs 1 Lb. No. 21C—Compact Rosewood Lever. Each Net. \$35.00

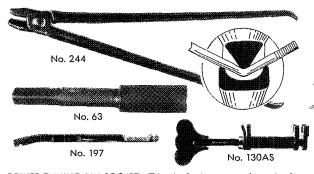


PIANO FACTORY STYLE TUNING LEVER—Specifically designed by Schaff. 13" overall with an unbreakable 7" PVC plastic handle. Steel shaft is welded at the head for extra strength. Specially designed tuning tip is locked in position with machine screw and lock washer. Hardened tool steel tip will withstand stress and pounding to set and level tuning pins. Standard with a star tip but square tip available. Approximately 17° angle head. Weighs 14½ oz. No. 18—Factory Tuning Lever. Each Net. \$16.00

REPLACEMENT TIPS FOR FACTORY STYLE LEVER—These tuning lever tips can only be used with No. 18 Tuning Lever. Available either as a star or square type tip.

No. 14D—Factory Star Tip. Each Net. \$6.00
No. 14E—Factory Square Tip. Each Net. \$6.00

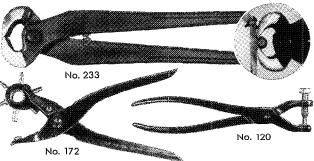
FENDON NARROW WALL TUNING TIP—A must tool for all piano tuners. Whenever tuning pins are too close together (as in the extreme treble of smaller size pianos) for a conventional sized tuning tip, use this narrow diameter Fendon tip. Comes 2½" long, chrome plated and will fit any Schaff tuning lever. Remember, this tip is not designed to take the stress for high tension notes in the bass and tenor sections of the piano. Use only where you have tuning pin clearance problems.



POWER TUNING PIN SOCKET—Triangle shank on one end, star head on the other. Used for fast removal of tuning pins with a reversing power drill. 3½" long.

HAMMER HEAD EXTRACTOR FOR SPINET PIANOS—As a complement to our regular type No. 130A Extractor, this tool is used only on certain spinet pianos where there is a short distance between the hammer butt and hammer head. Use with our No. 130B Clamp for broken hammer shanks.

REVOLVING PUNCH PLIERS—Used for punching round holes in leather, plastic, rubber, canvas, cardboard and similar material. Made of steel with 6 tapered, non-clogging hardened steel punches in the following sizes: 5/64, 3/32, 7/64, 1/8, 5/32 and 3/16 inches, Overall tool length is 9" with a weight of 8 oz.



GRAND HAMMER HEAD EXTRACTING PLIERS—By far and away the best tool available for removing grand hammer heads from their shanks. Pliers are made from casted magnesian bronze and are chrome plated. Adjustable screw has a finders point to prevent slippage during hammer head extraction. Overall length is 8", weight 10 oz.

No. 120—Grand Hammer Extracting Pliers. Each Net......\$16.50

ORIGINAL FACTORY TYPE WIRE BENDING PLIERS—At long last, after a year in developing, this pre-World War I wire bending plier is now available. By a new method of casting we have had a mold built and can now duplicate the original design that proved so successful in the past. You can be sure that there is nothing on the world market that comes close to duplicating this plier. Made of stainless steel, measuring 9" long, the plier weighs only 9½ oz.

No. 244-Original Wire Bending Pliers. Each Net......\$29.50

GRAND KNUCKLE EXTRACTING PLIERS—One of the most ingenious ideas we have seen for solving an age old problem of removing knuckles from grand hammer shanks. As the insert picture shows, simply grab the knuckle and gently squeeze the pliers. This tool is a standard heavy duty cutting nipper made from a drop forged casting, has a polished head and red enameled handles. Overall length 10½", weight 1 Lb. 3 oz.

THE HOUSE DEDICATED TO SERVICE



For Same Day Service Try Our 24 Hout Phone

(312) 438-4556

PIANO SUPPLY COMPANY
451 OAKWOOD ROAD, LAKE ZURICH, IL 60047

Piano Technicians Journal

CONTENTS

EDITORIAL/Don L. Santy	4
PRESIDENT'S MESSAGE/Sid Stone	6
COMING EVENTS	6
TECHNICAL FORUM/Jack Krefting	8
KNOW YOUR OFFICERS/Dan Evans	13
AFTER TOUCH/David Pitsch	14
THE TUNER/Paul Monroe	16
SOUND BACKGROUND/Jack Greenfield	18
IN THE FIELD/Ben McKiveen	20
BUSINESS SENSE AND ETHICS/Kai Schrodt	22
A CAPITAL VIEW IN '82	25
BOOSTER CLUB	26
ON MEMBERSHIP	27
BOOK REVIEW	28
AUXILIARY EXCHANGE/Julie Berry	29
CLASSIFIED ADVERTISING	31

Cover...This excellent illustration of piano tools was sent to us by Les Jorgenson, a Registered Technician from East Lansing, Michigan. For information on prints used on the cover of the *Piano Technicians* Journal, contact Mr. Jorgenson, at 1135 Sunset Lane, East Lansing, MI 48823.

® The words Piano Technicians Guild, Inc., and the logo are registered with the Patent and Trademark office -- unauthorized use is strictly prohibited.

THE PIANO TECHNICIANS GUILD, INC.

113 Dexter Avenue North Seattle, Washington 98109

Telephone: (206) 283-7440 682-9700

Office Hours: (Pacific Time) 8 am-5 pm Monday-Thursday 8:30 am-3:00 pm

Messages may be left after office hours by calling (206) 682-9700. Your call will be answered by a tape

Friday

recording machine.

US ISSn 0031 9562 Foreign and Domestic.

PIANO TECHNICIANS JOURNAL, the

official publication of the Piano Technicians Guild, is published monthly and issued to members. Annual subscription price: \$60 per year; \$108 for two years; \$5.50 per single copy. Editorial Offices: 113 Dexter Avenue North, Seattle, WA 98109. Telephone (206) 283-7440 or 682-9700. Closing date for copy and advertising is six weeks prior to date of publication. Advertising rates are furnished on request.

Reprints of most articles are available from the Guild home office, 113 Dexter Avenue North, Seattle, WA 98109. Price per page (plus postage): \$1.25 for the first page of each Journal article researched, \$1.00 for additional pages of the same

Second Class postage paid at Seattle.



1981/1982 **Executive Board**

Officers

SID STONE, President 16875 E. 14th Street San Leandro, California 94578 (415) 481-1903

ERNEST S. PREUITT, Vice President 4022 S. Fuller Independence, Missouri 64052 (816) 252-2885

CHARLES HUETHER, Secretary/Treasurer 34 Jacklin Court

Clifton, New Jersey 07012 (201) 473-1341

BOB RUSSELL, Immediate Past President 1414 Lander Road Mayfield Hts., Ohio 44124 (216) 449-5212

Regional Vice Presidents

ROBERT SMIT, Northeast 404-210 Woodridge Cres. Nepean, Ontario, Canada K2B 8E9 (613) 829-8655

MARSHALL B. HAWKINS, Southeast P.O. Box 10386 Oxon Hill, Maryland 20745 (301) 567-2757

TOM R. BLANTON, South Central 1516 Shields Drive Sherman, Texas 75090 (214) 892-3176

GEORGE PETERS. Central East 846 Westchester Road Saginaw, Michigan 48603 (517) 799-6133

RICHARD A. FLEGLE Sr., Central West 400 Groveland Avenue #1011 Minneapolis, MN 55403 (612) 644-9992

DANIEL A. EVANS, Western 4100 Beck Avenue Studio City, California 91640 (213) 762-7544

Journal Staff

DON L. SANTY, Executive Editor PATTY CONNELL, Managing Editor Graphics JACK KREFTING, Technical Editor GEORGE DEFEBAUGH, Recorded Journal Reader

© February 1982

HALE SIGHT-O-TUNER

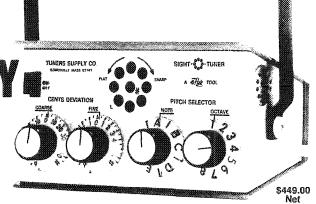


No machine will ever fully replace a fine tuner's musical genius. But the Hale Sight-O-Tuner electronic tuning device will complement your skills. It allows you to tune any piano faster and more accurately than you ever thought was possible.

Even in the noisiest environment, you choose which note you want to tune and it will tune that note only. Extraneous sounds won't affect the special tuning light on the HALE SIGHT-O-TUNER. You can also tune faint notes, from up to 30 feet. Or individual harmonics. Or wild strings.

The solid state unit is about as accurate as you can get, to ± 1/2 cent, over nine full octaves. Internal calibration makes tuning forks and line frequencies obsolete.

It all comes in a compact, self-contained package which is light enough (2 lbs.) and small enough (3½" high x 7" wide x 6" deep) to fit inside your



briefcase. Bring it indoors or outdoors. It's battery operated to eliminate line or microphone worries.

Every professional tuner, music or orchestra director could use and should have one.

Let the HALE SIGHT-O-TUNER make your tuning easier. Join the thousands of people, including the late Arthur Fiedler, who already have.

TUNERS SUPPLY COMPANY

Serving the Music Industry Since 1884

EASTERN BRANCH: 94 Wheatland Street, Somerville, MA 02145 • (617) 666-4550 WESTERN BRANCH: 190 South Murphy Ave., Sunnyvale, CA 94086 • (408) 736-2355

THE NEW ENGLAND SCHOOL OF

STRINGED KEYBOARD INSTRUMENT TECHNOLOGY

Department of North Bennet Street Industrial School

PIANOFORTE HARPSICHORD CLAVICHORD

TWO-YEAR COURSE

Instructors: William E. Garlick David C. Betts

FIRST YEAR - In Tuning, Regulating, Repair and Maintenance, Acoustics, History, Business Practice and Promotion.

SECOND ADVANCED ELECTIVE YEAR -Comprehensive plano rebuilding, advanced

tuning, regulating and voicing. Harpsichord and Clavichord maintenance.

N.B.I.S. admits students of any race, color, religion, sex, national or ethnic origin. For further information write: William E. Garlick, Program Director, Dept. Piano Tech., 39 North Bennet Street, Boston, Mass. 02113 or telephone (617) 227-2357,

PIANO SERVICING 3 DMINDT

By ARTHUR A. REBLITZ, RTT "The Technicians' Bible" \$17.50 +\$1.50 SHIPPING & HANDLING

THE VESTAL PRESS

Box 97 • Vestal 62, NY 13850 (N.Y. Res. Add 7% Sales Tax)





SOUNDBOARD DECALS

vailable at piano supply houses orldwide OR

PRO PIANO 3916 18th Street San Francisco, CA 94114 Telephone 415/621 1210

The Piano Workshop

3166 West 33 St., Cleveland, Ohio 44109 Phone (216) 631-1777 or 631-1991

PIANO KEYS RECOVERED

Sets of 52 extra thick key tops replaced, .075" or .095"

Molded key tops, .075". \$49.00 Molded key tops, .095". \$54.00 Above with fronts, add. \$20.00

Plastic sharps, gloss...\$39.00 Plastic sharps, dull \$54.00 Genuine Ebony sharps . \$69.00

Three working day turn-around time. Return shipping and insurance included. Remittance with order, please. We replace pin blocks and install soundboards.

Service and installation center for Northeast Ohio for Marantz pianos and pianocorder units. Complete library of tapes available.

Let our computer work up your plain wire string scale for you. Write for details.

You can't afford to have the job done wrong.

EDITORIAL

Don L. Santy Executive Editor

The past few years are those of success and growth — and yet of great sadness. Several of our cherished members passed away, leaving behind grieving families and devoted friends among the Guild. Their steadfast dedication to the goals and objectives of the Guild and their personal sacrifices and contributions shall leave a legacy long remembered in those who carry on.

There is nothing unusual in Death, it is often expected and sometimes prepared for, but always comes as a crushing blow to those who survive and loved them. This is the acid test of inner strength, to endure the agonizing days and months that follow.

I remember many years ago, a recent widow who stood before a Board of Directors and read a two page eulogy to her husbands life. They had been married for over a quarter of a century and their union was strong and devoted. While there was some moisture in her eyes and a slight guiver in her voice, she showed tremendous courage and made it through the entire ordeal. She is an Association Executive now and at a recent meeting I reminded her of that incident. When asking her how she managed the strength to go through it, she confided that it was only her total and abiding faith in her religious beliefs that enabled her to carry on.

The late medical missionary, naturalist Albert Schweitzer once said, "The real tragedies of life are those things people stop believing in". It must be extremely difficult for those who have no beliefs to face up to life's inevitable ending. Not so much for those who die of course but for the losers who must now face the world alone.

I recently attended a funeral of my wife's uncle Henry. Henry was a hardware salesman, busy and active practically up to the last breath. His wife of some fifty years also showed remarkable strength and courage in the face of this trauma. She had the Minister read an epitaph at the funeral she had chosen for this sad event. This represents to me the ideal philosophy with which to face this kind of tragedy.



A COMMITMENT TO LIFE

Death is a reality that I am coping with today.

While I am feeling like a victim,

I remind myself that I will survive.

Though grief is normal and I must grieve for my own health's sake, I grieve not as one who has no hope.

Though I am familiar with sharing decisions, sharing experiences, and doing for another as well as myself:

I can be alone without feeling lonely,

I can make decisions for myself, and

I can learn to do for myself all that needs to be done.

More than any other, I know what is best for me.

I will act on my own advice, as well as others.

As much as is possible, I elect to be in charge of my life.

I will remember: I cannot help that.

I do have some control over how long the memories linger. I have a choice as to how I deal with my pain.

I give myself permission to live.

to face reality and change it where I can and accept it where I cannot.

Like any other human being, I need to be close to another, at times.

The death of one so loved does not change that need.

I will actively seek closeness with others as the need arises.

I choose to live and expect the best that life has to offer.

While death is a reality, I will remember that neither death nor life shall separate us from the love of God. I am NOT alone.

I make my commitment to live life to the fullest, with God's help.



Permission granted from the author. © Jack V. Crawford, 1976 Seattle, WA

Steinway uncovers a classic.

The Steinway Model K has returned.

On the outside, its classic styling sets it apart from ordinary uprights. On the inside, Steinway craftsmanship sets it apart from ordinary pianos. In fact, it fills a room with a

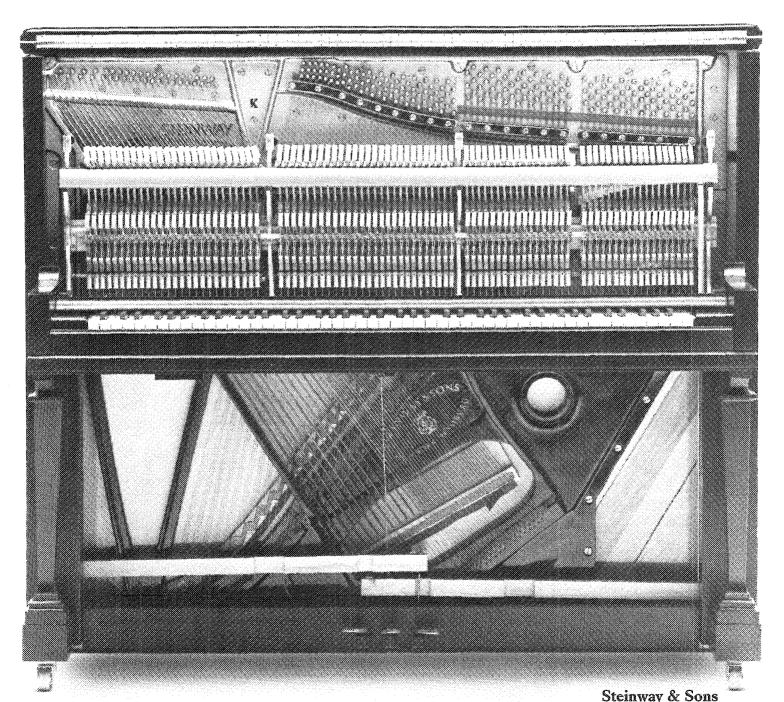
sound so powerful that virtually no other upright can match it.

The exclusive Steinway soundboard in this 52" piano is larger, so it helps generate the kind of tone you don't expect from an upright piano. And the Traditional K-52 also enjoys Steinway's patented Accelerated Action, so it gives you the kind of responsiveness pianists all over the world have come to expect from a Steinway.

All of which makes the new Traditional K-52 a very special upright piano. For it can give both teachers and students a chance to hear themselves practice on a Steinway before

the day comes when they find themselves performing on one.

To find out more about this classic new upright, write to John H. Steinway, 109 West 57th Street, New York, New York 10019.



PRESIDENT'S MESSAGE



Sid Stone, President

Due to my articles on the recent trip to China, the three major holidays; Thanksgiving, Christmas and New Years have come and gone without any mention of the President's message in the *Journal*.

However, it is never too late to say that our Thanksgiving should not be confined to one season of the year. We should continually be thankful to our creator for the blessings we receive with individuals, families, nations and even in our organization. The true Christmas spirit should be felt and promoted throughout the entire year. The one whose birthday we have just observed has had more influence on the world, and especially in our country, than any one else. Consider the number of laws that are based on the Ten Commandments. Consider the many colleges, universities, hospitals, orphanages, etc. built on the Christian foundation.

As for our New Year's message — if I say have a Happy and Prosperous New Year, you may say, "How can

we when we are in the midst of a recession?" When so many people are out of work and prices are continually going up, it may not be all that bad for the piano tuner technician. Some PTG members take advantage of the slow economy by concentrating on repair and reconditioning of pianos whose owners cannot afford to buy a new one.

There have been some objections, as there always are in good times as well as bad times, to the dues increase for PTG membership. Your delegates at council in San Francisco voted with very few objections to an increase equivalent to \$1.00 per month. The total national dues now is equal to two or three tunings. That is a small amount to pay to belong to PTG. If you know of any organization that gives its members more benefits per dues dollar than ours, I would like to hear about it. Furthermore, if we can make your dues dollars work better for you, we are always open to constructive suggestions. Let's make 1982 the greatest year yet for PTG.

Coming Events

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

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

UPCOMING CONVENTIONS OF THE PIANO TECHNICIANS GUILD

1982 July 4-9 Washington, D.C. Capitol Hilton

1983 July 4-8 New Orleans New Orleans Hilton & Towers February 19-21, 1982
CALIFORNIA STATE CONVENTION
Pasadena Hilton

Contact: Raye McCall 1078 East Third Street Pomona, CA 91766 (714) 622-8826

March 26-28, 1982
PENNSYLVANIA STATE CONVENTION
Pittsburgh, Pennsylvania

Contact: Robert M. Stern or Amy Stern Marshall 207 Harmony Rd. Warrendale, PA 15086 (412) 935-3176

April 16-18, 1982
NEW ENGLAND REGIONAL SEMINAR
Merrimack Hilton Hotel
Merrimack, New Hampshire

Contact: Herbert Benedict RFD 1, Sugar Hill Concord, NH 03301

> **May 1-2, 1982** MICHIGAN STATE CONFERENCE Holiday Inn Expressway Kalamazoo, MI

Contact: Harold Buyce 825 Bacon Road Kalamazoo, MI 49002 (616) 327-1871 May 21-22

INTERMOUNTAIN SEMINAR Holiday Inn Provo, Utah

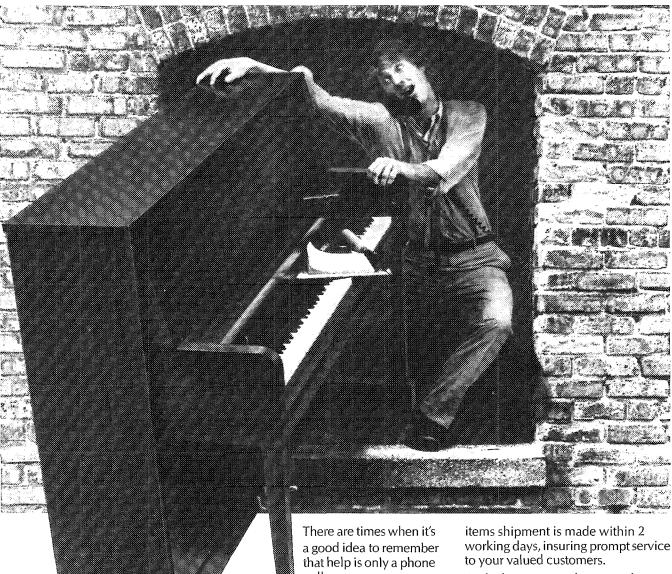
Contact: M. Jack Reeves 486 N. 300 W Orem, Utah 84057 (801) 225-1757

> April 3, 1982 L.A. CHAPTER ANNUAL SEMINAR University of Los Angeles

Contact: Lindasue Darling 828 Dickson Street Marina del Rey, CA 90291 (213) 822-9690

April 22-24
PACIFIC NORTHWEST CONFERENCE
Travelodge Tower
Portland, Oregon

Contact: Don Person 5545 SW Taylor's Ferry Rd. Portland, Oregon 97219 (503) 245-3424



Toll-free troubleshooting: 1-800-253-3416

call away.

A toll-free phone call to Bill Brandom, customer service administrator at the Everett factory. He's the man to talk to

when you need something fast whether it's technical literature or parts or just plain answers.

Right now, Bill is ready to send you our new Everett service manual. Just send your name, address, and Guild membership number to him and he'll promptly send your personal copy to you free.

As for cabinet parts, Bill guarantees shipment to you within 10 working days in almost all cases. On bass strings and other critically needed hardware

And when you need answers fast, Bill can give them to you straight away or call in engineers, designers, or production people to help solve your problems.

Save this advertisement to help you remember to call Bill Brandom at 1-800-253-3416 when you need action, not excuses. At Everett, we're ready to help.



Noteworthy pianos since 1883.



THE TECHNICAL FORUM

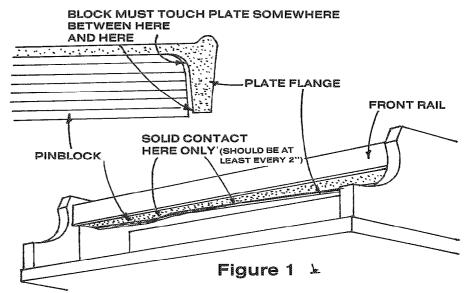
Jack Krefting, Technical Editor

BAD PINBLOCK FIT

QUESTION: "... There's a small grand at a local hotel which gets used a lot. It was rebuilt a few years ago, including a new pinblock, pins, strings, etc. Looks good, but will not stay in tune for one day. I tune it regularly once a week and still get complaints from the poor guys who have to play it. I'm not a green tuner, and have some pianos which stay in tune seemingly for years. After reading an article about pinblocks in the Journal, I checked this with a mirror and feelers and. sure enough, there's a space between the block and the plate flange. Now, my question is:

"I don't have a shop, and wondered whether I couldn't put the piano in their shop, top off and upside down, with the tension off. I could then loosen the block-holding screws and pry the block away from the plate flange slightly. Fill the crack with epoxy, then pull out the shims and tighten the block screws. This should anchor the block as well as a good fit in the first place, don't you thing? Any epoxy that spread around the pins would do no harm, and the whole procedure is a lot simpler than fitting a new block (the old one wouldn't do. because the holes would be wrong after fitting it). Your comments would be greatly appreciated." - H.G. (Hap) Knapp, Tweed, Ontario

ANSWER: I'm not enthusiastic about putting epoxy between the block and flange, especially if no provision is made to allow the removal of that block later. Some kind of mold release that would be compatible would answer that objection, but there are others. Suppose, for example, that there is a sizable gap between the top of the block and the plate web. When the epoxy flows in, what would stop it from running down the tuning pins, bonding the string coils to the pins and leaving globs on the ends of the pins? Of course, a thicker epoxy could be used, together with putty dams or other means of keeping the solution where it is wanted. But will it stay where it is wanted? We assume so. based on early trials, but we won't

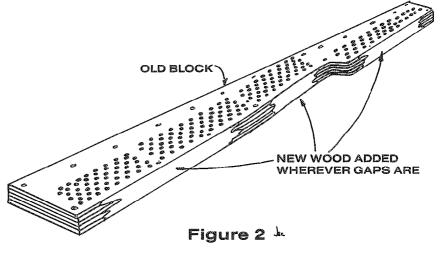


know that until many years have passed and specific tests have been made on documented installations. Some technicians within our ranks feel that the existing body of knowledge on the characteristics of epoxy constitutes proof that it will hold. Perhaps they are right.

The problem, as illustrated in **Figure 1**, is that there is a gap between the face of the pinblock and the flange of the plate. This can happen because of poor assembly procedures, or it could be that the block was never fitted in the beginning. The symptoms include tuning instability to an abnormal degree, tuning pins that touch the plate web or stand straight up and down (they should lean against

the pull of the strings), and difficulty in removing the action because the block has shifted downward in the middle.

The best solution, obviously, would involve fitting a new pinblock of at least equivalent quality. This eliminates the unknown factors and questionable repair procedures, but the cost of such a job makes it less attractive than some of the quicker alternatives. Mr. Knapp is quite right in pointing out that the existing block cannot be refitted because the holes are already drilled — they wouldn't line up with the holes in the plate web — unless new wood were added to the block as shown in **Figure 2**. Needless to say, the new wood must have



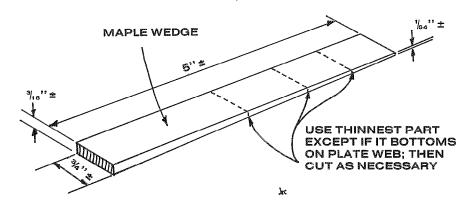


Figure 3

at least as much compressive strength as the block itself.

I am not seriously suggesting the above procedure, partly because it would be as much trouble as replacing the block, and partly because the tuning pins would have to be oversized to hold in a repinned block, which is a generally undesirable situation. What I am suggesting is that new wood be added without unstringing the piano or removing the plate. Figure 3 illustrates maple wedges which can be used to accomplish the same result, or at least a close resemblance to the desired result. Note the acuteness of the angle of the wedge. and its nominal dimensions, and the fact that each wedge may be cut off as required for a tight fit in a larger gap. The wedges are inserted into the gap and pushed or tapped upward until they are tight. If they bottom out on the plate web, they must be cut off so they will bind between plate flange and pinblock. Figure 4 shows the wedges in position before trimming. Note that they are placed closely together, never more than an inch or so apart wherever a gap exists, and that

the wedges on the edge of a gap protrude further down into the action cavity than do those in the middle of the gap. This is because the edges of the gap are progressively narrower, and less of the wedge will fit - but whatever the gap, it must be closed.

I will suggest the following procedure, which has been tried and proven many times over:

- Gather materials: Wedges, tuning tools, screwdrivers, small hammer for tapping wedges, glue, padded C-clamps (one or two), hacksaw blade and plastic or newspaper to protect the keybed.
- 2. Remove the action, lower tension about an octave throughout the scale (watch the heavy core wire, it breaks easily at the becket) and clamp the middle of the block tightly up to the web. Protect the keybed with paper or plastic.
- 3. Tap wedges into place with hammer, being sure that none are touching the horizontal part of the plate. All must firmly wedge between flange and block, and they tend to fall out when other wedges are being inserted, so a certain amount of doubl-

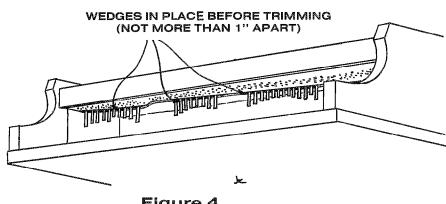
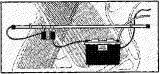


Figure 4



Thousands are earning **\$70** to **\$100** on every **PIANO** they equip with

DAMPP-CHASER® **ALL SEASON** AUTOMATIC HUMIDITY PROTECTION SYSTEM



End **90%** of Piano Problems

- Saves hundreds of dollars of repairs and service in the years ahead.
- Stabilizes Humidity within the piano 365 days a year.
- Builds satisfied customers, Increases piano sales.



NEW "out-of-sight" grand plano humidifier. You can proudly install a Dampp-Chaser Protection System in every piano. Acceptable in the finest homes, even on concert stage.

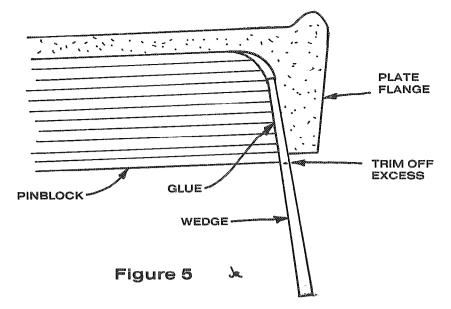
OUR 35th ANNIVERSARY

DAMPP-CHASER®

ELECTRONICS, INC. P.O. BOX 1610. HENDERSONVILLE, NC 28793



CALL TOLL FREE 1-800-438-1524 for FREE "BUSINESS BUILDING" KIT. Explains how DAMPP-CHASER SYSTEM benefits pianos and YOU! Join the thousands of "FULL SERVICE" Technicians.



ing back may be necessary. When the wedges are all in position, remove them one at a time and replace them with glue on the pinblock side (see Figure 5).

- 4. Tighten all plate screws and remove the C-clamps. If the piano is equipped with a horn wedge, be sure that it is in position and stays that way while the tension is placed on the piano. Tape it temporarily if necessary.
- 5. Chip quickly, preferably in 20 minutes or less. Check periodically to be certain that the wedges remain in position during the chipping. Once tension is on, they can't fall out. Trim the projecting parts of the wedges with a hacksaw blade or coping saw.
- 6. Remove the protective paper from the keybed, replace the action and tune two or three times as required. For best results, consider pricing the job so you can afford to return in a week or two to go over the tuning once more.

This job sounds more complicated than it really is — it can be done right in the customer's home in half a day, provided the technician arrives equipped with all the tools and supplies likely to be needed. If one were to compare this with the epoxy method, at the very least it becomes clear that the maple shim treatment is a lot less expensive and troublesome.

I imagine the day is coming when very little wood will be found in pianos, partly because of the scarcity of good wood and partly because of technological advances in the plastics industry. Pinblocks of the future might be factory-fitted with some sort of resin — as a matter of fact, I believe Lowrey grands are made that way now — and if it does the job I certainly have no objection. We might

even live to see pinblocks made of a non-wood material, or a revival of the Wegman wedge, or something like the old Mason & Hamlin screw-stringer or the Wurlitzer metal block. But for the moment, with this type of repair, I see no need to go to the trouble of using epoxy or boat resin or fiberglass when good old maple will do the trick with less work.

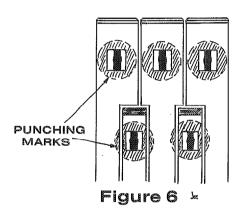
KEY DIP

QUESTION: "... regarding key dip in a grand or an upright, especially uprights, it seems: I have observed on the bottoms of the natural keys in several pianos, the "impressions" (dirt) of the front punchings for the sharps (see Figure 6). This means the white keys are hitting the punchings for the blacks before, or simultaneously with the time they hit their own punchings, precluding the attainment of accurate key dip regulation (Figure 7).

"Now, I have seen in some old uprights where the naturals have a groove cut in the bottom of the keys to clear the punchings for the sharps (see **Figure 8**). This is very rare, however. If the white keys are hitting the

black keys' punchings, is the key height or dip of either the blacks or whites wrong or what? Does cutting the above-pictured groove in the white keys change the touch-weight significantly enough to worry about?

"Incidentally, the above problem was encountered when trying to achieve a fine regulation in an upright action. I had set the key height, blow distance, let-off, and backcheck distance for the whites. Then I aligned all the "black" backchecks in a straight line with the whites. Then, I proceeded to set black key dip by adding or subtracting paper washers until the blacks checked the same distance as the whites (as suggested in, I believe, Reblitz' book). Either the backchecks were in a straight line and the dip would be uneven (because of the above problem) or if I set the dip to be uniform, the backchecks would be out-of-alignment, (Butt leather, catcher leather, and backcheck felt is



OK). It seems to me that the dip should be set for blacks and whites to achieve equal aftertouch, then bond the backchecks to get a uniform checking distance.

"I suppose this is the same problem as the blow-priority/dip-priority in a grand, which, to my reasoning, would be dip-priority/backcheck priority with blow distance as a variable, in an upright where the factory specs are unknown. Since the

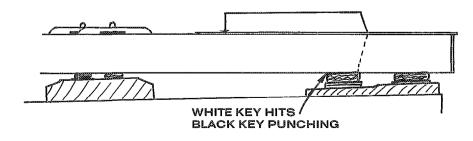


Figure 7 🟃

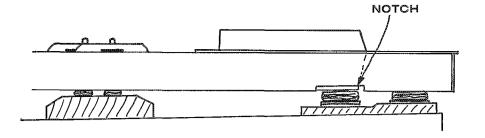


Figure 8)

player's fingers are operating the keys, not the backchecks, shouldn't uniformity of dip and aftertouch be a more important consideration than whether or not all the backchecks are in a straight line? (Though, when the action is new, everything's supposedly ''right'')

"I would like to think that a well-designed, fine upright action can be regulated to please the most discriminating planist. I've heard upright player-pianos repeat notes as fast as any concert artist ever will. But even if repetition remains a debatable issue, what else hinders the upright action from "feeling" as responsive as a grand?" — David G. Nereson, Denver, Colorado

ANSWER: First, let's go back to the punching impressions left on the edges of the natural keys. The illustration which our correspondent sent showed the front rail to be flat from front to back rather than stepped down as we drew it in Figure 6. The reason for a stepped rail is, of course, to allow for the difference in lever arm length between sharps and naturals. and to allow for approximately the same number of paper punchings on naturals as on sharps. The fulcrum point is different, which helps to equalize the key travel, but the capstan line is the same throughout the scale; any geometric compromises should have been made by that point in the action train, otherwise there will be a discrepancy in either dip or whippen rise, or both, with a corresponding unevenness of aftertouch. If the keyboard had been designed so that all keys were equal in length, none of this would be a problem.

In any case, the sharps dip into the center area of their punchings, compressing the center and possibly puffing up the sides. When the naturals compress their punchings beyond a certain point, it is easy to see how the contact between sharp punchings and

natural keysticks is possible. If the sharps have been set for an unusually shallow dip, for whatever reason. such contact is all the more likely. It is also possible that moths, mice or other pests have attacked the front rail punchings, riddling them to the point of sponginess. The dip becomes very deep, and the same circumstances can and will occur. Then, too, front rail punchings are available in two diameters - 34" and 1/8", if I remember right - and it is always possible for a piano built with small punchings to be reconditioned later with large ones, creating a problem if the front rail is flat on top.

The procedure often followed when using all new parts is, as David has indicated, to set the sharp dip on verticals by drumming off to an equal checking distance. This can cause unevenness in aftertouch and, obviously, unevenness in key travel. The only way to justify these measurements is to set the backchecks, set the dip, and then burn the backcheck felt off slightly on those notes whose hammers check closer to the strings. It sounds like a lot of trouble, and it is: but if you want even dip, even checking and perfectly aligned backchecks, that's the way to get the combination to work out.

Finally, with respect to regulating a vertical piano to please the most discriminating artist, that may not be possible. While it is true that a good vertical action will sometimes repeat even faster than a good grand action, it is equally true that it often does the opposite. Depending on conditions (mostly the position of the jack when the key is struck), a good vertical action might repeat at a rate anywhere from five or six blows per second up to fifteen or more, as they indeed have under test conditions. The good grand action may not be able to equal the fifteen blows achieved occasionally by the vertical, but it will reliably click off nine to ten, which the vertical cannot do.

The vertical action has three basic design characteristics which prevent it from competing with the grand in the area of sensitivity and reliable repetition. The first is the repetition lever, or rather the absence of one: the second is the fact that, while the grand relies on rebound and gravity, the vertical must rely on a combination of rebound, gravity and spring action to get the hammer back to a position away from the strings. The jack, meanwhile, is bouncing wildly on its butt felt and may or may not be in position when called upon for another note.

The third point, and one that is directly related to the others, is the fact that the main arm of the jack is so long in proportion to its tender that the jack tip must move a great distance when letoff occurs. That means that, in comparison to the grand jack, it must start escaping later in the cycle, and does so with an abruptness that precludes really fine adjustment. The longer the tender in proportion to the main arm, the less the jack has to move to escape reliably, and the closer the let-off can safely be set.

There are a host of other factors, certainly, which affect the relative merits of the vertical vis-a-vis the grand; I don't wish to oversimplify, but neither do I wish to write a book on the subject. Thanks, David, for a fascinating question. Comments from readers are invited.

BUZZING STRINGS

The following letter was received recently from a fine technician in Michigan, who writes: "...I thought I'd tell you about a repair I made today that worked out pretty well.

"The problem was buzzing strings in Section II (above the bass break) on a new grand, due to inadequate upbearing against the agraffes. The diagnosis was easy enough: you can feel the strings buzzing by lightly touching them on the tuning pin side of the leaking agraffe. Very firm pressure at this point may stop or reduce the buzzing. And an eyeball survey will usually confirm that the strings' angle of deflection through the agraffe is pretty shallow.

"Many unisons in this section were affected by the problem, but I located the very worst one for testing. I guessed that a Popsicle stick was about the right thickness, and inserted one between the strings and the support cloth on the plate behind the

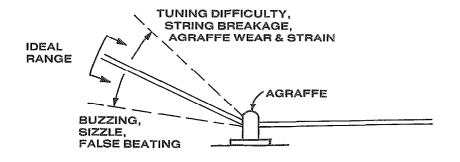


Figure 9 1/2

tuning pins. (Of course, the strings of this unison had to be slackened first.) Then I tuned it up to pitch again and tested. "Close, but no cigar," as the saying goes!

"So I tested again with two Popsicle sticks. Just right. I suppose if appearance didn't matter, and if this were the only problem note, and if ringing in the resulting duplex segments were not a factor, one could leave it at that. But such was not the case. So here's what you do:

"Loosen all strings in the section about 3/4 turn, unhook the beckets, and lift the coils carefully from the tuning pins. Then you can remove the old understring support. This may be simply a layer of cloth, or sometimes posterboard, pressed board or hardwood covered with cloth. In any case. measure the thickness of the whole business, including the test shims, and you will know the thickness to make your new string support. I made mine from a strip of harness leather (in fact, a No. 6 dog collar which is %" wide by 32" thick) covered with stringing cloth. The cloth is glued on the under side of the leather only, because the glue does soak through. This makes a very firm support which is just limber enough to conform to the survey shape of the plate, saving much awkward fitting work beneath the strings. Looks good, too, and I know it will outlast the strings.

"Then all that remains is to hook up the 70 or 80 strings once again, remembering to twist the wrapped strings, get some tension on the strings and neaten up the coils, seat the strings on the hitch pins, pitchraise a couple times around and tune. If you can finish the project in one working day, you'll be doing nicely..."

This is an interesting account, reminiscent of counterbearing adjustments made by other technicians, although they aren't always done for the same reason. I can remember Hal Lyne, the ageless Aussie, advocating the removal of counterbearing pads in favor of brass rod, a change calculated to prevent rust and ease string rendering. Others have made similar alterations for the purpose of tuning, or deliberately mistuning, a triplex; but Tom's purpose is to simply change the angle of counterbearing to prevent noise at the agraffe caused by an angle that is too shallow. If the string does not take enough of a bend upward at the agraffe, the termination is not solid and the strings may sizzle.

On the other hand, if this correction is overdone the results can be disastrous. **Figure 9** shows, without measuring angles or passing judgement on various makes of pianos, that

there would be a certain range of counterbearing angularity that would be considered acceptable. A steeper angle would invite tuning difficulty and string breakage, not to mention the increased strain and wear on the agraffes. A lesser angle would tend to cause buzzing, sizzle and false beating of strings. If one were not careful to check the angle cautiously, as Tom did when he added one Popsicle stick at a time until the noise stopped, the piano might not actually be improved by the alteration in the long run.

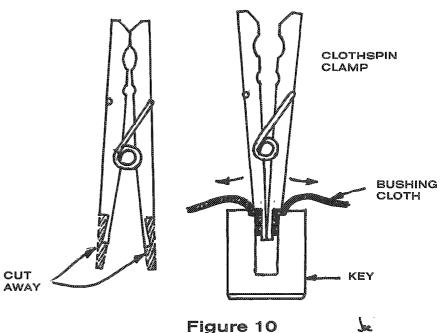
Finally, I would mention that when Tom talks about "stringing cloth" as a covering for the leather, he is not referring to felt or braid, neither of which is suitable for this application. Thin bushing cloth is just right for this, and is available in handy 1" and 2" widths from some of the supply houses.

GADGET OF THE MONTH

Here is a letter from Fred Tremper:

"Every once in a while the seasoned pro is upstaged by the beginner. In our class on rebushing keys, we used the metal rebushing clamps and have the students rebush the keys using them.

"The next class, one of our students, Don A. Stephens, brought a few clamps he had made out of clothespins. The tension was perfect and the shape allowed us to glue the felt into the recess at the bottom of the key. Enclosed is a sample (see Figure 10)... — Fred W. Tremper, School of Piano Technology, Maywood, Illinois



- Tom McNeil, Lansing, Michigan

IN CONCLUSION

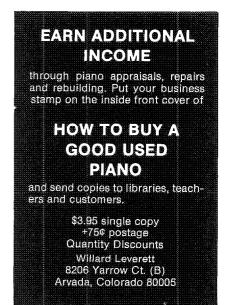
Don't be discouraged if the hot item you sent me doesn't appear in the next issue — it can't possibly, because we are working three months ahead. So by the time the item appears you will probably have forgotten that you wrote it and will be pleasantly surprised to see it in print. How about setting yourself up for a nice surprise early next summer? We always need questions, articles, comments, tips and gadgets for publication. Send all technical material to me at this address:

Jack Krefting, Technical Editor, PTJ 3802 Narrows Road Erlanger, KY 41018

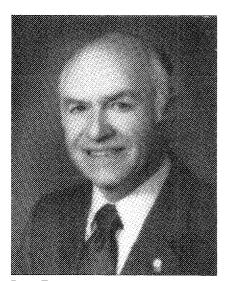


NEW PUBLICATION BINDERS

The Home Office can now supply publication binders which will hold 12 copies of *The Piano Technicians Journal*, 9" x 12" size. The vinyl blue covers are plain. Cost: 1/\$8 or 2/\$15 plus postage and handling. This larger size binder has been ordered in response to requests. The supply is limited and orders will be filled in the order they are received. Please confirm previous requests.



KNOW YOUR OFFICERS



Dan Evans, Western Regional Vice President

Daniel Albert Blankenhorn was born in Michigan in 1911. At the ripe young age of two weeks, he was taken to Boston. Dan's father was the son of Bavarian parents, and his mother's folks were born in Wales. Dan's mother was an accomplished pianist and organist.

Mr. Blankenhorn became ill while seving on Home Guard duty in Boston Harbor during World War I. and died when Dan was five years of age. Due to the strong feeling toward the Germans at this time, the family name was changed to the mothers' maiden name. Dan, along with his sister and brother moved to Southern California in 1918. They settled in Hollywood, and Dan has never lived far from this area.

His prime love of music was the pipe organ and piano, but in the teen years he joined a chorus and discovered the joys of singing, in choirs and other light opera groups. Most of his education was in Hollywood, but he left high school in his senior year during the depression, as a parttime job became a fulltime one, and he was left alone after the death of his mother. Several years later he graduated from night school while working as a salesman for a large brass and copper manufacturer. Here he learned about the rolling and drawing of metals and non-ferrous metallurgy.

In 1940 he joined the Los Angeles fire department, serving thirty years, mostly as captain. During this time he entered college as a student of engineering, earning a degree. While on the fire department, he was asked to work for the largest pipe organ company in L.A., maintaining and repairing pipe organs. The company disbanded, and Dan became interested in piano tuning and technology. His first instructor was his own tuner, who was 85 years old, and who said, "one nice thing about this

business is that you can work as long as you can walk, and you work in the best room in the house." That gentleman was still tuning at the age of 931

Dan's teacher had come from the theater organ tuning field, and had not joined Piano Technicians Guild. But as soon as Dan learned about the Guild, he made application for membership. He was fortunate to live in the area served by the Los Angeles chapter, whose membership included many outstanding craftsmen.

Dan married a girl whom he met at church while working for the brass and copper company. They have two married children, a son and daughter, and three grandchildren. Daughter Linda lived in Germany for several years, so Dan and Marge started to travel. And it became a habit, with a number of trips to Europe, and others to Mexico, Central America and Japan. Dan has visited many piano companies and related businesses on his travels, and organized the first Piano Technicians Guild tour of Europe. He is a charter member of the International Association of Piano Builders and Technicians, and he hopes to have an active part in planning our tour of Japan and China in 1983, along with Sid Stone when the International Association of Piano Builders and Technicians meets in Kyoto, Japan.

AFTER TOUCH

David W. Pitsch, RTT Utah Valley Chapter

50 Point Guide To Grand Regulation Part XVII Feb. 1982

34) The Drop Continued

Regulation of the drop screw was defined last month as being the adjustment for regulating the point of escapement for the balancier. This month we will discuss how to make that adjustment and some problems that may crop up when regulating the drop.

The first priority is to have already regulated the let-off. Second, make sure that the repetititon springs are strong enough to support the hammer. Trying to regulate the drop with weak repetition springs is a lost cause. When watching the amount that the hammer drops after let-off, a weak repetition spring will let the hammer drop too far, since the spring is not strong enough to support the hammer. Adjusting the drop screw up under this condition will not cause the hammer to drop any less, and will be rather frustrating. Third, make sure that there is sufficient dip to enable action to complete escapement cycle.

To regulate the drop, remove the action from the piano and place it on a level surface. At this time the drop screws may be either too high, too low, or just about right. Remember that the drop screws must be low enough to see the hammer let-off, so frequently they have been turned down in order to complete step #33 The Let-off. But if the repetition springs were too weak, many times the drop screws must be turned up in order to see the hammer rise when regulating the repetition springs. So who knows where the drop screws are at this point?

Carefully depress the key of the note that you will be regulating until the hammer lets-off. Watch the amount that the hammer falls below this point of let-off. To make this judgement easier, I frequently depress the neighboring key first and

keep it's hammer in a raised position while adjusting the drop. Comparing the height of the hammer being regulated with it's neighbor at the point of the let-off and again after it has fallen, I can judge with great accuracy how much the hammer has dropped.

In my earlier years I was instructed that the drop screw should be turned until the hammer drops 1/2 the let-off distance. I will advise that it is faster, easier, and more accurate to regulate the drop (as well as other steps) by the way it feels. The ideal is to have the drop screw engage the balancier at exactly the same time that the jack is engaged by the let-off button. This "double escapement" can be felt by a good pianist, and with a little experience, a technician can learn to feel it also. Since I prefer to regulate an action at the piano, regulating the drop to be 1/2 the let-off becomes a problem. The action must be removed from the instrument in order to turn the drop screws. With the action out of the piano, how can a technician know what the let-off distances are (remember that I taper the let-off so it varies with each note)? I don't have space enough to carry around the complete shop, so I never have a letoff rack with me when I find a piano that needs regulating. The answer to this problem is simple; regulate the drop by feel rather than by a specific distancel

Let me go on record again about the use of let-off racks. I believe that they are a costly item which can easily be eliminated by using the piano strings themselves, which is most accurate. The time spent correctly adjusting a let-off rack to match the string height is in my opinion wasted, as well as being inaccurate.

Once the drop has been regulated, reinstall the action and check the drop visually against the strings. I usually wait and perform this check while regulating the aftertouch, since the way I adjust the dip is to watch

very carefully how much the hammer rises after the drop. More will be said on this during the discussion of step #35 The Aftertouch. Another good check to insure that the drop was regulated uniformly is to depress a group of keys and let the hammers go into check. Slightly release the keys until the hammers rise, as in regulating the repetition springs. All of the hammers in the raised position should be level to each other. If not, the drop screws were not regulated uniformly, since in the raised position all of the balanciers were blocked in their upward movement by the bottom of the drop screws.

There are two types of drop screws which are commonly found. One being a "female" style which accepts a small screwdriver, the other is a "male" style which is turned with a special tool from the supply houses. The "female" style which I will call the Steinway type is usually plated and causes very few problems. Just make sure that a proper size screwdriver blade is used. The other "male" style I will call the Mason & Hamlin type. It is usually unplated, solid brass, and tends to cause problems. These Mason & Hamlin type drop screws are frequently installed too tight and won't turn on a new piano. Or, because they were not plated, they tend to freeze up in their holes and won't turn on an older piano! Forcing these screws to turn often results in twisting the heads off.

After backing one of these frozen drop screws without a head out by hand and installing a new one, you quickly realize that you don't want to do this often! To free up frozen drop screws I either "zap" them or put a drop of WD40 right on the heads and wait for the lubricant to soak into the wood. Note that I did not say spray WD40 all over the whole action! Take WD40 in the liquid form and with a dropper put one drop on each screw. Be especially careful to keep WD40 away from the action centers and

buckskin.

A helpful hint on the Mason & Hamlin style of drop screw, I modify the tool. Take a file and make a small mark on the outside of the tool to show where the ends of the slot are. Using these marks as a guide, the technician can line up these marks with the position of the head on the drop screw and save alot of time trying to turn the tool until it drops over the heads of the adjusting screws.

Sometimes the hammers drop too far but the drop screws have already been turned up as far as they can go. With few exceptions, this is prima facie evidence that the action is very worn and needs to be rebuilt, starting with a new set of hammers. If new hammers have just been installed and this problem crops up, it means that the new hammers were not bored correctly to fit the piano.

Another problem which arises all too frequently is where the tops of the drop screws rub on the bottom of the pinblock. One cause is that the pinblock is delaminating. If so, you might even have to dismantle the plate in order to remove the action! In cases where the pinblock is OK but just was installed too low for the drop screws to clear, you have two options. One,

replace the pinblock and make sure the new one leaves enough tolerance for the action to clear. Two, replace the felt or leather on top of the balanciers which is engaged by the bottom of the drop screws with thinner material. I use a high grade of thin keybushing cloth for this repair. In order to regulate the drop correctly, the drop screws will have to be turned down from where they were, hopefully giving enough tolerance to clear the pinblock.

One last problem which frequently occurs on new Aeloian grands. The felt on top of the balancier was glued too far forward. Instead of fitting into the contour of the bottom of the flange so that the drop screw is the only thing which comes into contact with this felt, the felt first makes contact with the flat surface of the flange, causing premature escapement of the balancier. Looking at the hammer, it seems like the drop screw is turned down too far. But raising the drop screw does nothing to lessen the amount that the hammer falls, since the balancier never gets up high enough to contact the drop screw. The solution is to reglue the felt back a little on the balancier, or else just trim off the forward portion that sticks out too far.

JOURNAL SUBSCRIBER SERVICE

PLEASE SEND THE JOURNAL FOR 1 YEAR AT \$60

Change of Address? Please give us 4 weeks advance notice. Attach the label for your old address, write in your new address below.

Entering a new subscription? Check the box and fill in your name below.

Renewing? Check the box below and be sure your mailing label address is correct.

New Subscription
□ Renewal

☐ Payment Enclosed

	•	
Name		
Address		Apt. No.
City	State/Province	Zip/Postcode
Telephone	1	

PIANO KEYS RECOVERED

050 IVORINE • 24-HOUR SERVICE
Factory Method • Return Postage Paid
COMPLETE PIANO KEY RECOVERING
JOHN W. MYERS PIANO COMPANY
1314 E. Court Street • Dyersburg, Tenn. 38024

IMADEGAWA

HAMMERHEADS FROM JAPAN

Upright U

UW. 14lb. UX. 15lb. Grand

GW. 17lb

C-GX. 19lb

Available unbored, standard or custom-bored.

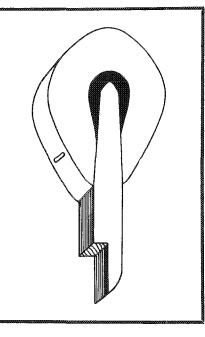
48 Hour service... VISA & MASTERCHARGE WELCOME.
For more information, please write or call....

U.S. TECHNICIANS

Robert Marinelli, Pres. **Pianotek.**U.S. Distributor
14237 Harper Avenue
Detroit, Michigan 48213
(313) 372-3954

CANADIAN TECHNICIANS

Paul Smith, Pres.
Piano Technicians Supply Co.
(Pianotek Ltd)
72 Old Orchard Grove
Toronto, Ontario, Canada
(416) 483-9622



THETUNER

Paul Monroe, RTT Orange County Chapter

(A continuing article directed to the apprentice and student member of The Piano Technicians Guild.)

The subject of the last three articles was "setting the temperament". This article will be tuning the octave, a part of tuning that bears as much attention and accuracy as setting a temperament.

I want to briefly mention a much discussed subject before getting into the meat of octave tuning and that is "inharmonicity". It is something you will have to deal with in almost every piano you tune.

You may recall one of the previous articles where the subject of partials was discussed and that a piano string, when struck, breaks up in 37 different frequencies called partials. Inharmonicity has to do with the second partial. It is usually sharp to the fundamental, ie: the first partial of A3 equals 220HZ. Theoretically the second partial should be 440HZ. Due to inharmonicity it will be more than 440HZ. Depending on the amount of inharmonicity it may be 440.2HZ.

You can easily see where this may cause you a problem when you try to tune your octaves perfect with no beats. If you want to know more about this phenomenon, attend a seminar or convention where the experts can talk to you in detail. Now on to octave tuning.

When you completed the temperament octave described in the last article, you tuned the octave F3-F4. Next, rough in or quickly tune E3 to E4 continuing to tune each octave to the bass-tenor break. That is where the wound strings start to cross over the strings in the middle section of the keyboard. This area varies from one piano design to another. On some spinets F3 is the bottom note in the tenor section and in some grands B2 is the bottom note in the tenor section.

The usual note that divides the tenor and treble section is D6, where the plate strut passes over the bridge. Notes on the C8 side of the strut or under the capo bar in a grand I call the treble section. Between the over-

strung bass and this strut or capo bar, I call the tenor section.

Let us move on to tune the octave F#3-F#4. Play the octave as you turn the tuning pin. Do not turn a tuning pin without listening to an audible tone. It helps you know what you are doing.

When you feel you have the pin where it belongs, start using your test intervals. Use the 3rd-10th test where the 10th should be slightly faster than the 3rd. Check the even beat rate progression of the M3rds and the M6ths. If you want to try a little more advanced testing, try the 6th-10th test.

This test is to check the 5th interval to make sure it is contracted. If you are tuning F#4 to F#3 and you want to check the 5th, B3-F#4, the note to play is the 10th below F#4 and the 6th below B3 which is D3. Make sure the 10th is beating slower than the 6th. This test is also a good vehicle to control the stretch in the treble section.

Continue tuning the next octaves. You will probably notice that about A4 you will lose the use of the tests for even progressing 3rds and 6ths as their beat rate is to rapid to discern. When this occurs start using the 10th interval to check the even progression of beat rates in intervals such as F3-A4, F#3-A#4, G3-B4 etc., etc.

As you continue up the keyboard you will be able to start using another test interval at C5, which is C5-F3, called a 12th. By description it is 5th plus an octave, the 5th being F3-C4 adding the octave which is C5. For this interval there should be no objectionable beat rate. At most a slow roll.

When you arrive at the point of tuning F5, you can add another test interval, the 3rd-17th test. This replaces the 3rd-10th test interval when the beat rate has become too rapid. Tuning F5 to F4, compare the M3rd, C#3-F3 to the 17th, C#3-F5. Again the 3rd should be slower than the 17th or the 17th should be faster than the 3rd. With the use of the 3rd-17th and the 12th test intervals, tune through C6.

At this point you can change from the use of the 12th interval to an interval of a 19th. A very simple change. It is the same note name as used in the 12th except an octave lower. ie: 12th = F4-C6, 19th = F3-C6.

Keeping things simple from C6 through C8, use the octave for tuning and turning the tuning pin, check it with the double octave, 17th and 19th test intervals.

When you start turning the tuning pin there is a phenomenon you can utilize in the top of the treble section to help you get close to where you want the octave to be tuned. If the note you are tuning is below the pitch you desire, and it usually is, listen closely as you start to increase the tension and raise its' frequency. As you approach the desired point, the volume of the note you are tuning becomes louder. This is due to the amplication of the partials in the octave. By definition, if you have two of the same frequencies playing at the same time, (in sync), they will be louder than just one. When the coincidental partials contradict or cancel out each other the volume is reduced. So when you are tuning the octaves and the partials sound like they are in sync, utilize the 17th and 19th test intervals to check your accuracy.

A word of caution. It is possible to pass the point where the note should be tuned and pass on into another set of coincidental partials that make the note sound louder. This is where the 17th and 19th test intervals can be of great value, ie: it helps in the reduction of string breakage.

A quick review on what you should be hearing, remembering that what you hear varies from piano to piano, so the following statement is a generality.

Tenor octaves — usually pure to a slow roll of 1 BPS

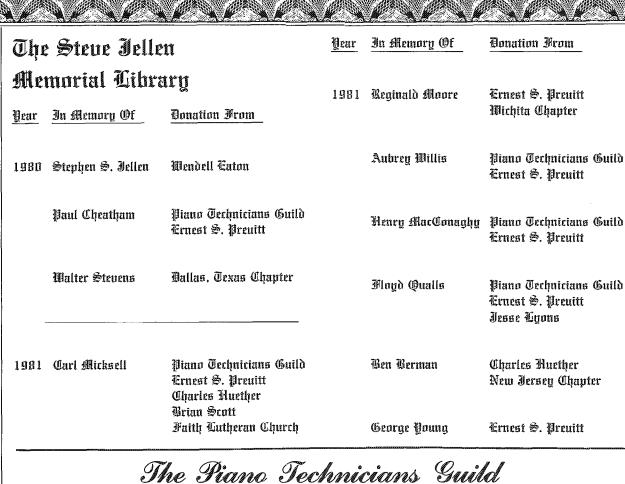
Treble octaves — expanded possibly to 2-3 BPS

10th & 17th intervals — moderate beat rate increasing in speed as you progress up the keyboard.

12th & 19th intervals — pure interval to one with a slow roll.

The next topic is going to be tuning the bass section but before that, I feel it is important for the beginner to go

Continued on page 21



The Piano Technicians Guild Foundation

The board of directors has authorized legal action to establish THE PIANO TECHNICIANS GUILD FOUNDATION to which members, family, friends, chapters and other supporters can make donations.

All donations to the Foundation will be published in the Journal showing the name of the donor, the person honored and the category specified for the donation.

Donations may be sent in memory of one who is deceased, or in honor of a person who has been a special inspiration or made a significant contribution to the profession and/or to the Guild.

A memory book, maintained at the Home Office, will be available for review at the annual conventions and will show the names of those honored and the donors.

The new Foundation will have 3 categories:
The Steve Jellen Memorial Library
The PTG Fund for Tech Research and Development
The Piano Technicians Guild Scholarship Fund

Donations should be made out in the name of the Piano Technicians Guild Foundation and sent to the Home Office at 113 Dexter Avenue North, Seattle, WA 98109. Please send the form below with your donation or a letter giving the same information.

	by making this donation \$	
	ALL PIANO TECHNICIANO CIUI DI FOLINDATIONI	category
	of the PIANO TECHNICIANS GUILD FOUNDATION date date	
address		

SOUND BACKGROUND

Jack Greenfield, RTT Chicago Chapter

MUSIC DURING THE ROMAN ERA

After the conquests of Greece during the second century B.C. and Egypt during the next century, Rome absorbed much of the Greek music culture that flourished in Alexandria as well as in Greece itself. Greek music became the dominant element blended with the music of the Etruscans native to the Italian peninsula and with music from areas of Asia Minor conquered by the Romans. Rome attracted a large influx of foreign musicians and entertainers who introduced the music and instruments of their homelands.

MUSICAL INSTRUMENTS IN ROME

The Romans improved and furthered the development of the musical instruments which became more complicated and capable of greater sonority. The kithara, one of the most popular - especially for solo performance, was made larger and the number of strings was increased. The strings of the harp wire also increased. Harps were used to a greater extent by the Romans than the Greeks. However there was less interest in the smaller lyra. The wind instruments of Rome included; reeds. pipes, flutes and even bagpipes from the East and brass instruments of Etruscan origin. The organ achieved great popularity in public performance and in homes of the wealthy. The hydraulis is mentioned in about 50 known contemporary literary references and is shown in a smaller number of pictorial representations.

The design of the hydraulis had a number of disadvantages: its construction required precise engineering with good metal, it was hard to maintain, corrosion was a problem, and moving the instrument was difficult. After several centuries, Roman builders introduced several improvements:

 The cylinder air pumps were replaced by bellows made of wood and leather. The water cistern/air chamber air reservoir was replaced by a flexible leather pouch.

The earliest known mention of these changes is a reference written in the second century A.D. It is not clear whether the instruments discussed had either one or both modifications. The oldest pictorial representation of an all-pneumatic organ with both modifications is on a medallion from about 300 A.D. The hydraulis disappeared several centuries later with the fall of Rome.

MUSICAL PERFORMANCE IN ROME

The musical entertainment of Rome covered a wide range of activities the resemblance between Roman and modern musical life is remarkable. Musical entertainment flourished. Musicians rose to high social status and organized professional associations or guilds. Types of musical performances described in accounts of Roman social life include: private entertainments at villas, recitals, concerts by large musical ensembles, music in the theater for plays and dance performances, music outdoors by street musicians, and accompaniment for the spectacles in the amphitheaters.

Brass wind instruments were used mainly for military music, but horn and trumpet players formed part of the opening procession followed by gladiators, athletes or other performers in amphitheater shows. Later music was provided by a small orchestra that included a hydraulis and brass wind instruments. Besides its use in the arena, the organ was played in the theater, at the circus, and at weddings and banquets.

Outstanding instrumentalists and individual artists who performed in concerts and recitals achieved great popularity. They toured constantly and received enormous fees. Some successful performers built up large followings and were mobbed by crowds the same as those that surround some of the "star" entertainers of today.

THE MUSICAL CAREER OF NERO

There was also a considerable amount of musical activity by nonprofessionals. Men and women of the highest social levels became distinguished amateur musicians. Included among these were several emperors who played musical instruments. The one who took the greatest interest in music was Nero. Although a cruel tyrant, he had an almost fanatic love for music. He played the kithara, organ and bagpipes; he sang and wrote music. He studied and practiced diligently. In 59 A.D., at the age of twenty-two, six years after becoming emperor, he gave his first public concert at his palace. He became obsessed with a desire for public adulation as a musician and organized his own cheering section, the Augustiani, a group of rough young nobles that attended his concerts and bullied the audience into showing enthusiastic response to the performances Nero continued throughout his reign.

Some accounts state that he sang during the disastrous fire in Rome in 64 A.D. He could not have played the "fiddle" then because bowed, stringed instruments did not appear until about 1000 years later. In spite of the increase in turmoil and disorder under his despotic rule, he pursued his musical career until his downfall and death in 68 A.D.

STUDY OF GREEK MUSIC THEORY CONTINUES

The study of Greek music continued in Alexandria under Roman rule and also spread to Rome itself. During the reign of Nero there appeared several works on music theory by the scholar Didymus, considered of especial importance in the development of scales and tuning. The identity of the author is uncertain. There was a Didymus in Alexandria who is known to have written on philogy, but recent historians believe that another person, Didymus of Rome was the author of the musical studies. Most of the original music writings of Didymus

have been lost but his work was discussed by Ptolemy and other writers who appeared later.

Didymus's theories for division of the monochord and ratios for intervals of the tetrachords moved the tuning of scales closer to just intonation. One of his changes in the diatonic tetrachord was the use of the interval ratio 5:4 (386.3¢), which gives a pure major third as opposed to the much sharper Pythagorean third 81:64 (407.8¢). By calculation, the difference in pitch between these two different thirds is a smaller interval with the ratio 81:80 (21.5¢). In Greek music theory this interval may be referred to simply as a comma, but to avoid misunderstanding, it is identified more precisely as the syntonic comma or comma of Didymus. The interval between the pitch reached at the end of a tuning cycle of twelve pure fifths and fourths and the starting pitch, for example B#C, interval ratio 531441:524288 (23.5¢), is always referred to as the ditonic comma or comma of Pythagoras. The difference between the ditonic and syntonic commas is the smallest interval of Greek music theory. It is known as a schisma, its ratio is 32805:32768 (approximately 2¢).

The development of Greek music theory reached its climax in the work of Claudius Ptolemaeus, or Ptolemy. Later Greek music investigators offered no significant new ideas, but their writings provide the only knowledge of lost works of earlier scholars. Ptolemy not only reviewed the history of music theory and discussed doctrines of his predecessors, but also presented new principles of scales and tuning he had conceived himself.

Ptolemy was born shortly before 100 A.D. His parents were Greek families that had settled in Egypt and had been granted Roman citizenship after Egypt became a Roman province. Ptolemy spent his working life in Alexandria as a mathematician, geographer, astronomer and music theorist. He is noted for his extensive astronomical studies, assembly of geographical data and system of map projection, treatment of light refraction and exposition of music theory. Considered the most learned and lucid on ancient music, his three volume series of books, Harmonics, written in mid-second century A.D. covers principles of acoustics, Pythagorian and Aristoxenian scale doctrine, instruments including a 15string monochord for determining interval ratios, scales in use in actual performance, and Ptolemy's own theories for construction of intervals and scales.

His stature as a great scientist was not diminished by some of his beliefs proved not valid later. He believed in astrology and supported the earlier Greek astronomical theory that the earth was motionless at the center of the universe with stars as spots of light in a concave dome over everything. His geographical errors in overestimating the size of the and Eurasian land mass derestimating the size of the oceans led Columbus to undertake his famous vovage of 1492.

Ptolemy's writings gained wide acceptance among scholars for many centuries. Some of his books appeared later in Byzantine (Greek) editions and in Arabic translations. His influence extended into western Europe and continued to remain strong until the new discoveries in learning of the Renaissance.

Quality Instruction Utilizing: State-of-the Art Equipment Low In-State Tuition for U.S. Citizens Equal Opportunity Institution Male, Female, Handicapped

GCC

Write for our brochure Grayson County College Piano Tuning and Repair 6101 Grayson Drive Denison, Texas 75020

PIANOS

Buy and Sell We will supply you in all U.S. and Overseas Wholesale Lots (216) 291-3838

HOME PIANO CENTER



POST OFFICE BOX 1813 CLOSED

The one-year referral period has elapsed. Hereafter, the Postal Service will not forward mail addressed to the Piano Technicians Guild at the above P.O. Box.

If you have any pamphlets or brochures that you distribute in your business, showing the mailing address for Piano Technicians Guild, please make sure that the current address is shown: 113 Dexter Ave. N., Seattle, WA 98109.



Piano Keys Recovered With



ART IVORY

Over 50 years of continuous service to dealers and tuners

WRITE FOR COMPLETE PRICE LIST

O. E. SHULER CO., Inc.

149 E. HARRISON ST. PARAGON, INDIANA 46166

INTHEFIELD

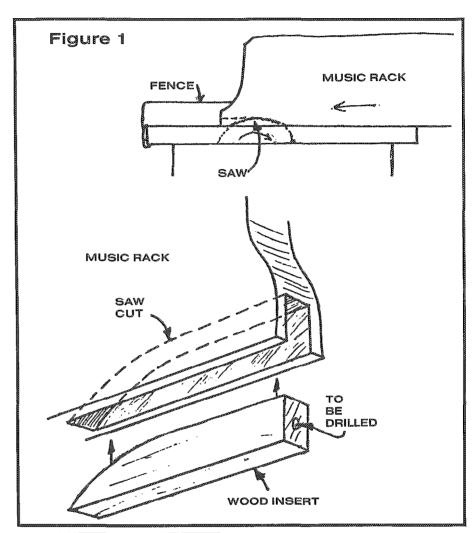
Ben McKlveen, RTT Cincinnati Chapter

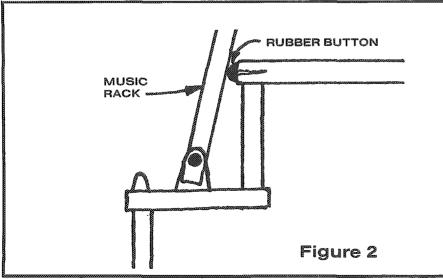
In a previous article, I wrote about bench repairs. This article discusses music desk problems. There are any number of repairs or adjustments that you, as a good technician, can do that will please customers and enhance your reputation. Things like caster repair, fall board adjustment, lid hinge repair or the replacement of rubber buttons and nails will show customers that you care about your work, and that you provide a superior service.

One of my pet peeves down through the years has been the poor design of music desks on some of the pianos we service. This column will attempt to deal with the problems these designs create.

One of the most common failures is the music rack on spinets and consoles that splits out. The rack is held in place by two screws and has little or no reinforcement at the rear. When pressure is applied to the front the leverage is too much and the wood splits or pulls loose at the bottom.

Jim Campbell has come up with an effective repair. He removes the rack from the piano and makes a couple of passes into the rack with a table saw to cut out the split core stock. The cut is 1/4 "x1/2"x2. Then he fashions a patch out of a piece of 1/4" stock that is slightly harder than the original. He

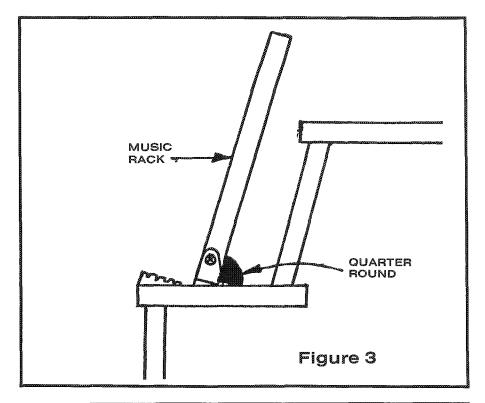


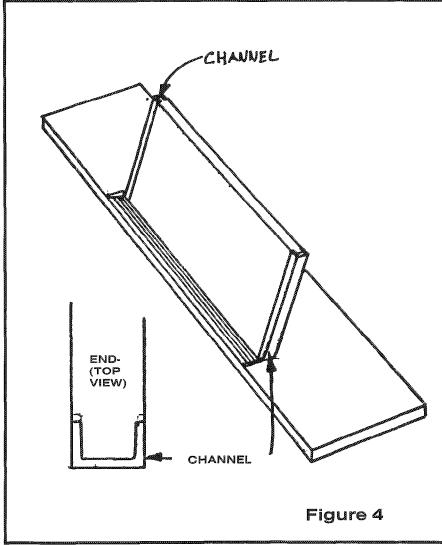


glues this in place, then trims, colors and redrills for the screws. **See Fig. 1**

I try to anticipate the problem of a split rack before it happens. On some pianos I have added a rubber button or a bumper of felt if the desk is close to the top, but doesn't touch it. **See Fig. 2**

Sometimes the distance between the back of the rack and the piano top is too great for the above remedy. In this case, I glue a piece of ¼ round to the back of the rack to give it a wider base and thus greater support. **See Fig. 3**





In cases where the rack is fragile and the piano is subjected to hard use, I screw the 1/4 round to the desk as well

Grand racks have their problems, too. Those that rely on three hinges with very small short screws are going to cause trouble sooner or later, especially those with no back brace. Several months ago I was called to tune an Imperial Bosendorfer at a art gallery here in Cincinnati. I walked in, put down my tool case, and grasping the music desk by the rack, pulled it toward me. The rack came off in my hands, spilling nine tiny 1/4"x#2 screws in among the tuning pins. My first job was to go out and buy some \(\frac{1}{16} \) x#3 screws to put the desk back together. When ever possible I try to reinforce this kind of rack with a back brace, either a double-foldinghinge or a hinge-and-prop.

Sometimes even the sturdiest of desks will break. The desk of a Baldwin D in a school was vandalized a year or so ago. My repair was to fit the left and right edge of the rack with a piece of aluminum channel. It worked wonderfully well and was quite attractive. See Fig. 4

*Some of the supply houses sell brass devises that will work on spinet and console music desks that have square sides.

Oversize screws, props, bumpers and even a total change of mounting are ways of coping with these desk problems. Keeping the mountings tight is a way of preventing trouble from starting But sometimes damage or failure makes heroic measures and a lot of imagination necessary to effect a repair.

The Tuner Continued from page 16

back and re-read this article up to this point. Write a summary, go to the piano and start tuning. Writing sometimes helps you to intern information faster. This method will also help you follow rules #1 and #2 and you won't have to utilize rule #3. If you didn't read these rules in my previous article, they are: Rule #1 — Know what you are doing. Rule #2 — Know why you are doing it. Rule #3 — If you don't know the answers to #1 and #2, ask guestions.

Due to space limitations octave tuning will be continued in the next issue. Remember, practice—read—practice and practice some more if you expect what you read to benefit your career in piano tuning.

Business Sense and Ethics

By Kai Schrodt

Reprinted from the Washington, D.C. chapter newsletter, "Alpha News", December, 1981.

I used to think that tuning was the one aspect of our business which took the most time, if ever, to learn, but after the combined efforts of Wendell Eaton and Carlos Ralon to instruct us in business sense and ethics, some may find argument here.

Carlos began the class discussina the dealer-technician relationship and emphasizing mutual understanding. When servicing a piano for a dealer we should be familiar with that company's warranty and no matter what brand or model of piano, we should do the best job that we can, with attention paid not only to tuning but also to the proper operation of the piano's action. Some of the responsibilities are:

- 1. In a clean tool kit, carry one of best sets of tools you can and have literature available on piano care.
- 2. Be confident of your abilities but at the same time know your limitations. Don't get yourself and the dealer in a mess by taking on too much.
- 3. Don't make snap decisions about problems or ways to deal with them. Know your piano and what it needs in the way of repairs and costs before you start to explain things to the customer.
- 4. Learn to sell your service and your products. The technician that works for a dealer is an extension of the dealer.
- 5. You, and whoever has access to your business phone, should have a pleasant, organized manner when talking to customers.
- 6. Be on time, and if you have a job that needs another hour of work, arrange to do it another time, and keep up with your present day's schedule.

Wendell continued from this point with the independent technician's business basics. He pointed out that

we are all independent business people who must make a living and that an individual should learn as much about the business as he or she can. A few considerations about appointments preceded the section on estimating, and they include:

- 1. Keeping an appointment and being on time; only monopolies can afford to keep people hanging..
- Card files are a good idea--call people that you've promised you would call for regular service and don't add new people that might displace old customers.
- 3. There is no excuse for not being on time for the first appointment of the day.

Estimating for shop repairs was the main topic of the evening for Wendell and he began by emphasizing the need to charge for your time estimating because time is what we have to sell. You need to take long enough to made an accurate estimate for if it is too high you will lose a job and if it is too low, you'll lose money.

How much will it cost to do the job and make a profit? Well, after you figure the number of hours it takes to do a job, you can multiply that number by a "benchmark" factor of 2½ times your hourly rate and add your cost of materials. This factor allows you the markup on materials you need inasmuch as you have your capital wrapped up in them. You could invest your money in other ways, you know.

Your hourly rate is a reflection of your overhead and may be difficult to figure but it can be estimated by adding the following and breaking it down into months, days and hours: interest on capital invested, insurance, taxes, rent, heat & utilities, tools, vacation, sick leave, life insurance, hospitalization, social security, advertising, payroll, accounting and retirement.

When estimating, have a confident manner and remember that there are some cases where an accurate estimate cannot be given until the piano is in the shop and torn down. Remember, you must know your materials costs to estimate accurately. And regarding materials-always have more than one set on hand so that you can move a piano in and get it done.

OMISSION

In the December, 1981 issue of the *Piano Technicians Journal*, we ran a full page ad expressing our thanks to our advertisers for 1981.

Due to the recent reorganization, and an energetic "cleaning up" of our advertising files, we "cleaned" three of our advertisers right out of the ad. OUR SINCERE APOLOGIES GO TO:

Bosendorfer Piano Ltd.

Kimball Piano

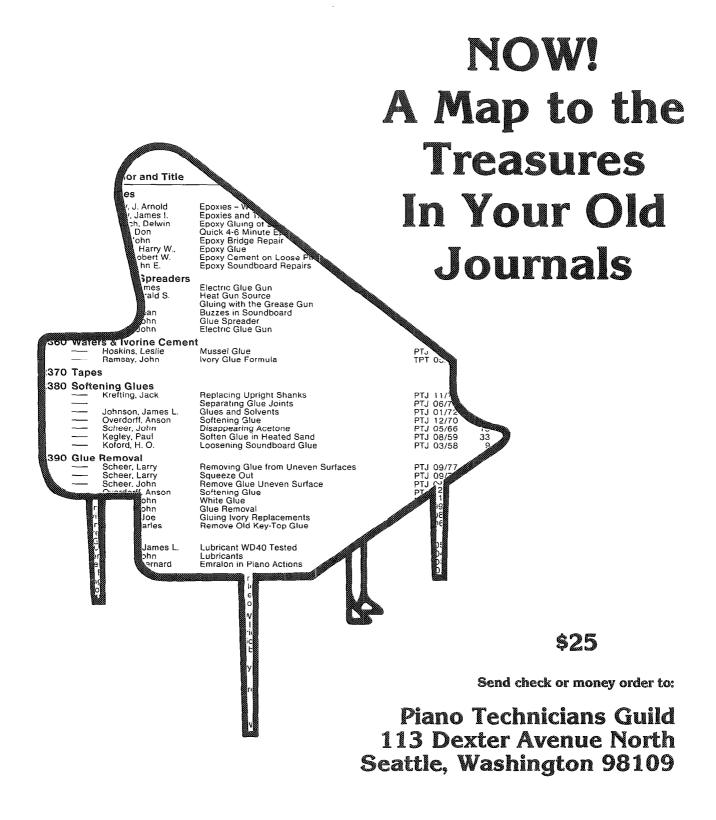
Grayson County College

Our Sincere Thanks
For Their Continued Support

SALES ORDER FORM

	Quantity Ordered	Total Price	Item	Quantity Ordered	Total Price
BUSINESS AIDS		······	Tape Measure — 6' metal: 1/\$3.00		
Ballpoint Pens — gold, writes blue and red — 1/\$3.50 — 2/\$6			Teacher Recital Program Covers -	-	
Billing Pads — 2-part with logo imprint, 50 per pad — 1/\$2.50 — 3/\$6			JEWELRY	_	
Bumper Stickers — yellow/blue/white: \$1 each			★ Membership Pin — lapel-type, gold with blue and white logo — 1/\$4		
Coffee Mugs—white pedestal/blue logo 1/\$4 — 2/\$7.50 — 4/\$12 — 6/\$16.50			★Tie Clasp — bar type, gold with blue an white logo — 1/\$3 — 3/\$6 — 12/\$18	d	
Dash Cash — emergency coin dispen-		······································	★Tie Tack — gold with blue and whit logo — 1/\$3 — 3/\$6 — 12/\$18		
ser, white with blue logo — \$1.00 each Deluxe Portfolio/Briefcase — 11"x14"			PUBLICATIONS and MISCELLANEOUS		
with clip board, dark brown — 1/\$10.00 Flashlight Pens — gold, comes with			Chapter Publicity Manual — \$5 each		
battery — 1/\$4.50 — 2/\$8 JOURNAL Binders — brown with gold			Index of Journal Articles — 1/\$25.00 Pamphlets — 100/\$11 — 500/\$50		
letters — \$6.50 each Key Ring — heavy plastic with laminated			A-440 and Your Plano	OUT OF	STOCK
blue/gold logo — 1/\$1.00			Care of Your Piano		
sew-on patches, all are priced the same: 1/\$1.75 — 3/\$3 — 6/\$4.50. Indicate colors: blue/white, blue/gold, black/			Be Tuned?" Piano Pointers Reminder Cards "Should I Have My Piano Tuned		
gold			in the Summer?" The Tuner To Turn To		
wooden blocks — all sizes are priced the same: \$15.00 each. Indicate size/type: %" round, ½" round,			The Unseen Artist	Э	
114" piano or ¾" piano			What is a Registered Piano Technician? — card with Code of Ethics — 7¢ each	f	
cate size/type: 1¼" round, ½" round, ½" round, 1½" piano or ½" piano			All items below are available free fror the Home Office.	י	 \ /
k Logo Stickers — peel-off backing, blue/ gold/white — A and B styles. A — for inside glass B — regular 8½" logo — 1/\$3 — 2/\$5 — 6/\$10 3½" logo — 1/\$1.50 — 2/\$2.50 — 6/\$5.50 1½" logo — 10¢ each (Min. order 10) (B only)	Show A or B		Lending Library List List of Manufacturers & Suppliers Magic Kingdom Club Application Members Benefit List. Reader's Digest Reprint: "The Other Masters of the Keyboard" limit 10 per order.		
Meeting & Sales Portfolio — 16"x12" — Navy \$1.75			"The Plano Tuner — Technicians What is The Plano Technicians Guild?"		/\
Piano Service Appointment Forms—small, green 6-part 100/\$14.50			* For use by Registered Technicians only ADD SHIPPING A **Actual shipping and handling charg orders from Canada and overseas.		
3-part, 25¢ each		**************************************	If order Below \$5 to \$10 to \$15		
letter-sized, 2-part 10¢ each Pocket Protectors — white vinyl with		monte en entre de con-censor	totals: \$5.00 \$9.99 \$14.99 \$24. Add: \$2.00 \$2.50 \$3.00 \$3.5		
blue logo — 3/\$1.25 — 6/\$2			Washington State residents only :	ıdd 6.4% sales tav	
Service Stickers — red and blue with logo. Plain — 100/\$4 — 200/\$6 — 500/\$12			ORDERS SHOULD BE PAI		
Imprinted with your name/address — \$45/1000			Enclose check or money order for this am	ount TOTAL U.S. FUNDS	
			me		
			lress //Stateor Province		
MAIL TO: PIANO TECHNICIANS GUILD 113 DEXTER AVENUE NORTH SEATTLE, WASHINGTON 9810		Zip	Postal Code	Phone	

i



Now, you can find the information you need — quickly and easily. It's all here in the "Classified Index to Published Piano Technology." This 293-page index can guide you to any one of the thousands of articles that have appeared over the years in the **Piano Technicians Journal** and four other publications related to piano technology.

All you have to do is look in the index under the subject heading you need. There you'll find listed all of

the articles published on that subject.

You'll find out who wrote a particular article, the title of it, the issue in which it appeared, and the page number. Then, you just grab the issue you need, and the information is yours. Quick and easy.

And, the home office of the Guild can send you a reprint of any article listed in the index that you don't have. So, how can you afford to be without it? Order your index today.





A Capitol View in '82

In case there is anyone who still hasn't noticed, the Washington, D.C. Chapter has become one of the most energetic in our national organization (1st Place, Chapter Achievement 1980; 2nd Place, Chapter Achievement 1981). Whoever attends their lively and well-planned meetings is quickly taken by the mood of technical and professional dedication. The '82 Convention is considered a very Piano special occasion for Technicians Guild in the Washington area because Washington was the site of the first National Convention 25 vears ago.

On a recent visit to that city. I met with '82 Institute Director Wendell Eaton, who over the years has received every major Piano Technicians Guild award. We spoke of the summer to come in Washington. To mark the 25th Anniversary of the National, it was determined to schedule not only classes covering traditional subject areas, but also offer many things relevant to the piano trade, yet unique in convention programming. Listening to some of these proposals in the midst of winter called up a lovely vision of that beautiful city if July. I walked away holding an early copy of the Technical Institute program: in my hear, instead of sugar plum fairies. I was already sketching out the classes I would attend.

I called Wendell the next day and as we talked he read me the course outlines that he had received thus far from the instructors. When I mentioned that these self-descriptions could be prepared for the Journal as the best publicity for the Institute, he and his assistant director cheered to the idea of someone outside the host chapter volunteering for the job (I'm still not sure I did, but that shows you how well-organized the D.C. Chapter is) and so here, along with its framework tale, is the first monthly installment on the Technical Institute Program for Washington, D.C. '82.

> Teddy Primack, RTT Long Island Chapter

Vertical Piano Construction

Wally Brooks

Traditional factory construction methods. Application to a small shop-built 40" console piano. Craftsman construction process: Pinblock, Soundboard, Bridge-building, Plate-setting and Stringing the Back. Case and Keybed construction. Making and installing Keys and Action. Damper and Hammer installation. Fine finishing. A 3-hour class designed for students of piano technology, experienced field technicians or rebuilders, and for the craftsman interested in the possibility of someday building his/her own piano.

Weight-Watching

Ben McKlveen

The origin of key-weighting. Why and how they are installed at the factory. Shop installation. How to reweigh keys. Special problems. Field service approach to touch-weight preferences. 11/2 hours.

Progressive Grand Regulation

Chris Robinson

The operation of the grand piano action. The function of each component. Limitations within which the action parts must operate. How to accurately determine regulating specifications for yourself (rather than be dependent on "book specs"). Variations in parts encountered in actions of one manufacturer over the years and how to deal with them. Explaining regulation to the customer, and selling the job. 3 hours.

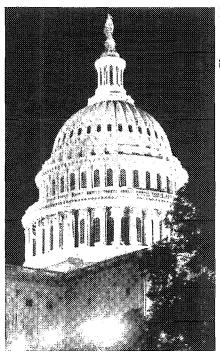
An Armchair Tour of Washington, D.C.

Now we undertake the monumental task of telling all of you about the many exciting sightseeing adventures awaiting you when you come to Washington, D.C. Short of writing our own guidebook (which is a good thing to have while there), we'd like to take you on an "armchair tour" of many of the sights, both famous and infamous, popular and little-known, all of them interesting, historically important, and most of them free. You will find them all within a few blocks or a few miles of our convention headquarters, the Capital Hilton Hotel, just up the street from the White House.

GOVERNMENT BUILDINGS: The White House — its best to get visitor passes from your congressman or senator; Treasury Department Exhibit Hall and where you can buy newly minted coin sets in the "Cash Room"; the new FBI Building which gives guided tours (you'll stand in line some); National Archives — the original Bill of Rights is on display

here; the IRS Building (only if you want to see where your money goes); Post Office Department which has a sales room for the philatelists; the U.S. Capitol where you'll spend a couple of hours viewing the whole place and seeing both the House and Senate Chambers — you can do it on your own or with a guided tour; the House and Senate Office Buildings (there's an electric tramway connecting these with the Capitol); the Bureau of Printing & Engraving where the money is made before it goes to IRS (probably some waiting here); The Supreme Court — it may not be in session in July but you can tour: The Library of Congress - Here you can roam freely, view many interesting exhibits, see a movie about its history and function, see one of the most ornately decorative lobbies anywhere and there is also a new addition which your writer hasn't seen yet.

Continued on page 31



1981 - 1982 MEMBERSHIP BOOSTER CLUB

Pts. Mbrs.

ASHEN, J.G	1	1
BALGIAN, Agnooni	4	1
BITTINGER, Dick	1	1
BRADY, Stephen H	5	1
BULLOCK, William	5	1
CALLAHAN, James J	1	1
CAMPBELL, James	1	1
COX, Merrill W	1	1
CRABB, Larry	3	3
DEUCHAR, William	1	1
ERWIN, Harold	3	1
EVANS, Daniel A	1	1
FARRELL, John	5	1
FOX, Lee	5	1
FRANZ, Dennis	1	1
GARRETT, Joseph A	1	1
GILLER, Evan	10	2
GOODWIN, Garland	5	1
GREENWAY, Alton William .	5	1
HAINES, Roy	1	1
HARMON, Clayton C	1	1
HARRIS, Dale	5	1
HAUSMAN, Donald		1
	1	1
HAWKINS, Marshall	5	
HENRY, Fern L	5	1
HERWIG, Lewis	3	
HESS, James	5	1
HIGBY, James H	5	1
HILBERT, Felton	1	1
HOFSTETTER, Robert	1	1
HUNT, Newton	8	2
KEAN, Kerry	4	1
KOKTAN, Paul	8	2
LAFON, William I	5	1
LUY, George	1	1
MASTAGNI, Angelo	1,,,	1
McANNINCH, Daniel	1	1
McKLVEEN, Ben	3	3
McMORROW, Edward	5	1
MEEHAN, Joseph	1	1
MEHAFFEY, Francis	1	1
METZ, Al	1	1
NEIE, Gary	5	1
NELSON, Robert	4	1
NELSON, Robert	4.,,,	1
ODENHEIMER, Fred	1	1
OUSLEY, Robert	5	
PARKER, James	1	1
RAUDENBUSH, Fred R	6	
ROBINSON, Marion	4	1

RUSSELL, Bob 1 1

SCHULTZ, Gary H. 2

SCOTT, Dennis..... 1 1

SEWELL, Arnold M. 4 . . . 1

THILE, Scott E..... 1.... 1

WALKER, William H..... 1.... 1

WALKUP, Kenneth 5.... 1

WEST, Richard..... 2.... 2

WHATMOUGH, Alan..... 5.... 1

WILEY, John.... 1.... 1

Booster Club



Ernie Preuitt Vice President

WINSLOW, Allyn S	1,.,.	1
WOLF, Robert	5	1
YAKOBOSKY Walker	Δ	1

1981 - 1982 RECLASSIFICATIONS

Reclassification to Registered Technician

BIRCH, James S.
Connecticut Chapter
DOMMER, Robert
Twin Cities Chapter
FRANK, Robert L.
Southern Tier Chapter
GREYLING, OWEN J.
Ottawa Chapter
HARVEY, Wirt T.
Phoenix Chapter

Reclassification to Allied Tradesman

ISAAC, Ari Toronto Chapter

Reclassification to Apprentice

BECK, Carl
Cleveland Chapter
PEAKE, David E.
Portland Chapter
WILKINSON, Denis J.
Portland Chapter

MEMBERSHIP POINTS

Five (5) points will be credited for bringing in a new registered technician, four (4) for an apprentice, three (3) for an allied tradesman and one (1) for all other memberships.

PRESIDENT'S CLUB

Those who achieve 15 points will receive the President's Club ribbon. At the Awards Banquet each will be presented with the 1982 President's Club pin, and the member who has the most points will be announced and honored.

RESTORER'S CLUB

Those who bring in a former member will receive the Restorer's Club award ribbon in addition to the point credits.

BOOSTER CLUB

Everyone who brings in a new member will receive the Booster Club ribbon at the convention.

NOTE:

Your name and your own chapter should be shown IN PRINT on the candidate's application on the line "recommended by", for your guaranteed full point credit. (Sometimes credit cannot be applied because the sponsor's name cannot be deciphered).

CORRECTIONS

Should there be a need for correction on the Booster Club or other lists, please notify the Home Office promptly. We want you all to receive full credit at all times.

NEW MEMBERS

Registered Technicians

North Central Louisiana Chapter

FREEMAN, Henry J. 1120 North 3rd Street Monroe, LA 71201

Seattle Chapter

GROSS, Christopher B. 7318 Alonzo N.W. Seattle, WA 98117

BURNELL, Craig L. P.O. Box 702 Hadlock, WA 98339

Member at Large

LIPPERT, Jon F. 404 North Perry Ave. Jupiter, FL 33458

ON MEMBERSHIP...

Ralph Kingsbury
Past President
Piano Technicians Guild

My father was a very fine FACTORY piano tuner.

He finally got a job tuning for the BIG store in the BIG city, and they sent him on his first tuning job. He came back empty handed. They wanted to know why. He said that a "sticker" was broke on middle C#, and he couldn't tune the piano because he didn't know how to repair a "sticker".

This was in 1915. He asked many older tuners about these problems, and usually their reply was, "Find out for yourself, kid". My father was a fine man, and later on in life, during the great depression, he taught me how to tune a piano. We became members of a tuners' organization just before World War Two. In 1944, he was elected a national officer.

I would return home from a regional seminar and actually tell my dad how to "repair" this on a piano. He was amazed. He was involved in the "politics" of the organization while I was going to class and absorbing as much information as I could.

Later on in life, I became an officer in Piano Technicians Guild. I had taught my son and now it was his turn to receive all the benefits of conventions and seminars. The story repeated itself, and when I came home from the "politics", my son Richard met me with the information that "This is the way we do it now, Dad.

"Piano Technology is a NEVER ENDING study.

"The greatest gift is a portion of thyself.

"WHERE WOULD WE BE, WITH-OUT PTG."

Ralph

Allied Tradesmen

Detroit Windsor Chapter

SCHENBURN, Gary J. 21409 Audrey Warren, MI 48091

Modesto Chapter

REA, S. Paul 1701 Atlantic Modesto, CA 95351

Students

Blue Ridge Chapter

FREEBORG, Gregory J. Rt. 1, Box 323 Barboursville, VA 22923

Central Washington Chapter

QUALLEY, Harvey L. 915 No. 15th Ave. #44 Yakima, WA 98902

Cincinnati Chapter

JOHNSON, Nina S. 728 Avon Fields La. Cincinnati, OH 45229

Memphis Chapter

GUSTAFSON, H. LEONARD, JR. 2981 Arrendale Memphis, IN 38118

Milwaukee Chapter

WALSH, Edward P. 5118 North 69th St. Milwaukee, WI 53218

Nebraska Chapter

ARMSTRONG, Sue E. 1322 West 4th Sioux City, IA 51103

SANTO, J. Lee 6904 North 16th #1 Omaha, NE 68112

Philadelphia Chapter

LYON, Ellen J. 1074 Delene Road Rydal, PA 19046

Santa Clara Valley Chapter

BROWN, Russell D. 620 Windham St. Santa Cruz, CA 95062

South Jersey Chapter

OLSEN, Jeffrey R. 121 Cadwalader Dr. Trenton, NJ 08618

Utah Valley Chapter

COOK, Cindy 1734 S. 500 E. Orem Orem, UT 84507

Western North Carolina Chapter

BROACH, Dan G. 2226 Shamrock Drive Charlotte, NC 28205

CHAPTER NOTES

From The President

Northern Virginia Chapter

Reading the technical forum in this month's *Journal* got me thinking of a "Catch-22" situtation most of us face every time we tune a customer's piano. We Guild members have all been exposed to -- and hopefully have practiced an enormous amount of -- expertise since becoming piano technicians.

Almost every piano we encounter could use a bit more than just tuning....a little damper regulation, taking care of that false beating string, smoothing out the let-off, evening the dip and after-touch, etc. Just where do we start, or better yet, where do we stop? Too many of our customers unfortunately don't know the difference. When we attempt to educate them, even showing them how we can improve their piano, they become skeptical. We become, unfortunately, just someone else after another dollar or three. So we give them what they want, a plain tuning, and let things go.

Further down the pike, the piano no longer needs just a few things correc-

ted, but now needs a major regulation and perhaps even premature part replacement, all of which cost a lot of money. Now the customer can't afford this work, so we are called upon to hold things together with band-aids and chewing gum. Before long, the piano is figuratively falling apart. It sounds terrible and nothing works right. Our customer blames the manu facturer, or even worse, us! We can't win for losing. If this isn't "Catch-22" what is?

Our ethics, as implied by the Guild regulations and by-laws, require us to continually promote piano technology and also, most important, the education of the piano owner. It seems to me that we owe our customers more than just a tuning. We can't tell our customers how to spend their money, but we can continually advise them of their pianos' need for regular maintenance.

Gene Elfes, President

From The President

Washington D.C. Chapter

One of the great distinctions of the Piano Technicians Guild and our local Chapter is the strong missionary-type zeal to proclaim the quality of our organization, and the integrity of our members, to the piano-owning public we serve. These thoughts are not only written and preached by the Home Office, but I find this fervor on the local chapter level. I cannot express enough my appreciation to those of you who perform so faithfully for the DC Chapter with a continual high level of service --- all done with little or no recognition.

Many of you have accepted for the first time positions on committees, and others are serving in other Chapter functions. It makes me as your new President happy to see this willingness to help with goals we have set for the year.

But, let me remind some others of you reading this message, be you old members or new, that the greatness of any organized group can only be measured, and increased, by the efforts of ALL of us together. Some of you need to establish contact with this Chapter again, and meet with us, contribute your talents and thoughts again. Many of you worked hard for the Chapter in the past and I'm aware of the abilities you have. Some of you newcomers who we see regularly need to take a part and find your place.

We have a big year coming up, and with the combined effort of all working together we can achieve higher goals than we ever imagined. Let us together proclaim the high standard of the Piano Technicians Guild on the local level. When we make the DC Chapter strong, we will be building a better national Piano Technicians Guild.

Carlos K. Ralon, President

BOOK REVIEW

Charles P. Huether Secretary-Treasurer

The Book of the Piano Edited by Dominic Gill Cornell University Press, Ithaca, New York

"The Book of the Piano", is one of those books which everyone says is a "must" to own. It is a large format, compiling a variety of chapters each written by a different author. Every chapter covers a different aspect of the phenomenon we call the Piano: its history, its manufacture, its development musically and technologically and its remarkable dominance of the development of western music.

The above summary seems like a tall order, but the book does the task in detail and does it exceptionally well. Anyone interested in the piano, or just music, should have this book. It is something one can read a bit at a time, at random. It is a fascinating book to thumb through as the spirit moves, it is a book which will give back new insights and understandings for years to come. Wonderfully printed with excellent illustrations and bound to last for many years, it should become a collectors item.

If there is anything to criticize about the book, it is its European orientation. Most of the writers are from Europe, the primary emphasis on the technological development is based on European techniques. But that is not a serious criticism. I would have liked the technical chapters to be more detailed, but that too, is a personal feeling. For more detailed technical information, one can go to the Piano Technicians Guild and its resources or the various books oriented solely for technicians. The technical aspects covered in this book are sufficient for the lay person, while at the same time still of interest to the technician.

In the chapter "The American Piano", page 182, there is an unattributed picture of the great "Piano Bonfire" in Atlantic City in 1904. This picture does not properly illustrate that occasion, for the fire was of square grands, not the uprights and straight grands in the illustration.

"The Book of the Piano" is a worthwhile, even necessary, addition to the library of anyone interested in the piano.

AUXILIARY EXCHANGE

1981/82 AUXILIARY BOARD

Officers

JULIE (Mrs. Ronald) BERRY

President 6520 Parker Lane Indianapolis, IN 46220

BELVA (Mrs. Richard) FLEGLE

1st Vice President 400 Groveland Avenue #1011 Minneapolis, MN 55403

SHIRLEY (Mrs. Richard) TRUAX

2nd Vice President R.D. #8, Box 40-E Heather Drive York, PA 17403

BERT (Mrs. Walt) SIEROTA

Recording Secretary 5201 Whitaker Avenue Philadelphia, PA 19124

AGNES (Mrs. Charles) HUETHER

Corresponding Secretary 34 Jacklin Court Clifton, NJ 07012

GINNY (Mrs. Bob) RUSSELL

Treasurer 1414 Lander Road Mayfield Heights, OH 44124

JEWELL (Mrs. Jack) SPRINKLE

Immediate Past President 6033 North 19th Road Arlington, VA 22205

Editor, Auxiliary Exchange

JULIE BERRY

6520 Parker Lane Indianapolis, IN 46220

PRESIDENT'S MESSAGE

Recently I participated in a national convention of French teachers. My husband attended as my spouse and kept making comments about wanting to organize an Auxiliary. By the time the convention ended we were both struck by some of the major differences between the French teacher's type of convention and a convention of the Piano Technicians Guild.

Ron soon discovered that not nearly so many spouses attended the teachers' convention as attended our piano technician conventions. And the people at the teachers' convention did not seem nearly as glad to see each other, to greet each other, and to spend time talking together, even though they had come from all over the country to be at this convention and they had not seen many of the people since their last convention. The academicians would probably be surprised to see how piano technicians depend on their national conventions as a time to build lasting friendships among themselves which carry over into the working relationships between technicians, and which tend to improve all of our standards of living as well as the standards of workmanship. The people at my French teachers' conventions were primarily academicians who were not expecting to combine their scholarly conclave with a vacation in any sense of the word.

Sometimes I meet piano technicians who think Piano Technicians Guild conventions should strive to be exclusively academic, eliminating the "non-essential" social activities. They scoff at the idea of an opening assembly possibly being inspiring, and they don't understand why people would want to spend \$25 or \$30 apiece for banquet tickets.

If these scoffers had attended the French teachers convention with me ...or if they would attend any one of various other academic conventions or industry trade shows...they could see firsthand why we in the Guild or its Auxiliary purposely incorporate opening assemblies, award banquets,

and Auxiliary activities into our working conventions. These peripheral activities which are planned to complement the institute classes become the "tie that binds." Technicians who would never think of tuning a piano for free will come share their knowledge for free because of what the Guild means to them. Technicians who have been going to classes for the last thirty years will keep coming back and paying another year's registration because they wouldn't want to miss the fine associations with others in their trade which have been developed through a series of opening assemblies, banquets, closing luncheons and the like. Auxiliary members around the country make plans to leave their jobs and their homes for a week in the summer to come share in a Piano Technicians Guild convention because they realize the impact these gatherings have on the technicians, on themselves, and on their relationships with the technicians.

As you make your plans for the Washington convention, please consider signing up for those "extras" that will help you get more out of that convention: the Auxiliary activities, the banquet, and the closing luncheon. Sometimes we may think that the institute classes are the only important part of the convention. Speaking as one who has just attended a convention comprised entirely of institute type classes. I can tell you it is important to complement the institute classes with some other types of activities in order to make the experience as complete and as enriching as possible.

Julie Berry, President

ARMCHAIR TRAVELING

with Dorothea Odenheimer

From April 28th to May 12th last year a group of our friends in the Guild had the opportunity to attend a Europiano conference in Switzerland. Dorothea Odenheimer has recorded some of her observations of the trip for the

Auxiliary Exchange. The first part of her accounts appears this month:

After a good flight to Frankfurt, Germany, and a fine overnight rest at the Sheraton Hotel by the airport to get rid of our "jet-lag," a bus was waiting for us to take us to the Europiano meeting in Switzerland. Before crossing the border the driver stopped at a small cafe for our lunch. The easiest for everyone to translate into German was "frankfurter and potato salad." It took a while since there was just one girl to take orders and cook, but finally we were off, only to meet the Evans and Mortons at the border. They took pictures of our bus. and we admired their new car in which they were traveling to Thun.

We had passed the Black Forest in Germany, and now the good "autobahn" took us through the Jura mountains towards our destination. We talked a little about this lovely small country with its oldest democracy (1291), singing a few Swiss songs. Passing some nice, clean villages we soon arrived in Thun where the driver stopped a man in the street to get directions. Soon we arrived in Gwatt which was to be our home for the coming week.

We were assigned rooms, dormitory style. Ours had cheerful red bedspreads. The balcony overlooked the lovely lawns, Lake Thun close by, and high mountains in the background covered with new fallen snow. The air was nice and crisp, so we walked to a nearby tea room for some good hot tea or chocolate. When it was time to pay, we learned about the Swiss money. We had gotten large notes here in the States which had gone out of circulation for smaller notes the beginning of the year. They finally did take our money, and we had a lot of fun figuring out customs of another country.

Most of our group had rooms on the same floor. You can imagine how much fun this was, discussions going on right in the hallway or in one room or the other. We did not have too much time for that though. Even the ladies had quite a schedule. For our three meals we had to walk over to the main building and find our napkins each in an envelope that carried our name. Also here, through the large picture windows, we were able to see the ducks on the lawn and Lake Thun not far away with high mountains in the background. Here we met technicians, and many brought their wives.

from Switzerland, Norway, Belgium, France, the Netherlands, England, Germany, Italy and Japan. We met Mr. Sasso, the president, who greeted the group in three languages.

The first day we visited a pottery which is famous for the Simmenthaler pottery, plates and bowls decorated and painted with the flowers of the area. (I loved the small one I brought home with me.) We all enjoyed watching the owner's son form some of the small vases on his wheel.

Mrs. Laeuchli, the convention director's wife, had arranged several tours for the ladies. She said she was a little afraid as she had never done anything like that before, but all turned out so well. We took a bus to Thun one afternoon to visit the Castle of Thun. All our ladies climbed high up into the tower on a small spiral stairway. We were also fortunate to have a tour through the oldest silver and gold shop in town. Willy Engel, the owner, took us around and was able to explain everything in good English. They make their own cameos. He showed us a necklace that was sold to an Italian count and was being cleaned for shipment.

Mr. Engel also took us into another old house behind his shop. We had to climb up to the fifth floor on an ever narrower spiral stairway. We were amazed to find a small concert hall up there with lovely upholstered chairs and a small stage with a large grand piano. Mr. Engel explained that he likes to invite artists and many of his friends to enjoy a concert. He likes his guests to dress formally. - I can hardly imagine ladies with their long dresses and high-heeled shoes climbing up there. - He also told us he had to get an army crane to lower the large grand into the building before the roof was finally closed. On our way down we were surprised by lovely hors d' oeuvres, wine and tea poured by Mrs. Engel.

On another afternoon the bus took us to Bern, the capital of Switzerland. We admired the beautiful gothic cathedral and had time for more shopping. Since it rains a lot of the time in Bern, the main shops downtown are in arcades. At eleven a.m. the big golden clock on the tower at the end of the street chimes, a small door opens and a group of figures come dancing around. The street is always full of admirers.

Look for the rest of Dorothea's account in the March Journal.

CHAPTER PROGRAM IDEAS

From Ginny Russell

Did you ever make a collage? A collage is a collection of pictures depicting a certain topic. This is most exciting and can be revealing. The Auxiliary could furnish poster board (any size desired, the larger the funnier). The pictures must completely cover the poster board. When announcing this program, make it a surprise. Have everyone bring old magazines, scissors, glue, and a newspaper. At the meeting, announce that the theme for this collage is "Life with a Piano Technician"! Explain what a collage is and let them go crazy. For instance, if your piano technician likes to fish, you might glue a picture of a big bass in one spot, perhaps a piano in another, or perhaps a mattress if your technician sleeps a lot. Let your imagination go wild. You will find as the excitement mounts, people will be finding pictures for each other. The end result? Take the posters into the Guild room, line them up against the wall, and let the Guild members fit the collage with the piano technician it represents. Give a prize to the winner. This is a fun project, and you don't need to know how many are going to be there, plus it involves the Guild with our activities. (This is a good winter project for all those Auxiliary members who have snow!)

NORMAN ROCKWELL PRINTS

At the time of this writing, the Auxiliary still has a few prints left of Norman Rockwell's Saturday Evening Post cover which featured a piano tuner and first appeared in 1947. Each 8" x 10" print costs \$3.50 (that includes postage and handling). Please make your checks payable to the Piano Technicians Guild Auxiliary and place your orders with Shirley Truax at R.D. #8, Box 40-E, York, PA 17403, if you are interested in having one or more of these prints. Thank you. Our thanks also go to the several hundred people who have already purchased copies of this print, making this a very successful Auxiliary project.

An Armchair Tour of Washington D.C. Continued from page 25

MONUMENTS: The Washington Monument and the Lincoln Memorial with the Reflecting Pool between them — in the Washington Monument you ride up 550 feet to view the entire city; the Jefferson Memorial (all of these especially beautiful when lighted at night); the Roosevelt Memorial which is on an island of its own.

HISTORICAL SITES: Ford's Theater and Lincoln Museum (completely restored in the original and an active theater); Petersen House (across from Ford's where you'll see the bed in which Lincoln died); Decatur House (1818); The Octogon (1814), the Old Stone House (1765); the Woodrow Wilson Home (small fee).

ART GALLERIES: Renwick (a most unusual gallery); National Portrait; National Gallery of Art and the adjoining East Wing which is an architectural marvel; the Corcoran; Freer; Phillips Collection; National Museum of American Arts; Hirshhorn Gallery and Sculpture Garden (another architectural delight shaped like a doughnut).

MUSEUMS: Marine Corps; Naval; Wax; Textile; Capitol Children's Museum where the kids can touch. In the Smithsonian Collection are: Arts and Industries, American History (formerly Technology); Natural History (the Hope diamond is here — also the dinosaurs); National Air and Space (this place thrills everybody — try to spend the whole day and be sure to go into the theater); and the original Smithsonian Building fondly known as "The Castle".

OTHER ATTRACTIONS: National Cathedral, National Shrine of the Immaculate Conception; St. John's Church (where Presidents go); the New Mormon Temple; Botanic Garden; John F. Kennedy Center which is a beautiful tour (and across the street from the Watergate); Explorers Hall in the National Geographic Society; L'Enfant Plaza; National Zoo (don't forget the Pandas); National Academy of

Science; Anderson House (containing among other things a magnificent piano restored by Eaton); Folger Shakespeare Library & Theater (a replica of the Globe); DAR Memorial Building which has 29 rooms decorated in different period styles, a children's doll and toy collection and exhibits of memorabilia dating from pre-revolutionary times; and the whole Georgetown area.

OVER THE BRIDGES INTO NEARBY VIRGINIA: Arlington National Cemetery, Lee Mansion, Iwo Jima Monument; the Pentagon (best viewed from the air when flying in) Gadsby's Tavern and Museum; Mt. Vernon and Woodlawn Plantation (little further away and charging admission); and Alexandria's unique Torpedo Factory Art Center and Old Town.

During the summer, many free concerts and outdoor ceremonies are performed and those of you who can get here early will reap the many bonuses of our 4th of July celebration including the special tour we're arranging to view the city by night, have a "country supper" with champagne (or soft drinks) and view the fireworks together in front of the Lincoln Memorial (save some money for this!). All of this is just part of whats available to you, so enjoy planning your visit and we'll be looking forward to seeing you in July.

Libby Blatt, Allied Tradesman Washington, D.C. Chapter

Ruth Ann Jordan, Local Host Chairperson

CLASSIFIED ADVERTISING

CLASSIFIED ADVERTISING RATES are 25 cents per word with a \$7.50 minimum. Full payment must accompany insertion request. Closing date for ads is the first of the month prior to publication.

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

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

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

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

on request. \$10,000 min. Write: George Sizemore, PO Box 11462, Phoenix, AZ 85061.

KEY BUTTONS FOR STEINWAYS. The finest basswood Key Buttons available for older Steinways grands and other makes

CUSTOMER'S QUESTIONS? The Piano

Owner's Guide will answer them between

tunings! Inquiries welcome. Hardbound,

\$6.95; Softbound, \$3.95. Trade discounts,

terms. Apex Piano Publishers, 1014 Ken-

twood Drive. Mountain Home, AR 72653.

1888 BALDWIN GRAND Ser. #1951. Solid

rosewood. Picture and copy of appraisal

(501) 425-7057.

finest basswood Key Buttons available for older Steinways grands and other makes with 0.162" Balance Rail Pins. \$49.95 plus shipping & handling. Order direct from the manufacturer. New England Piano Action Co., 6 Vernon St., Dept. T, Somerville, MA (617) 628-1591.

GRAND AND CONCERT GRAND piano (American or European), from the 18th and 19th centuries in any condition. Please write or call: **Edward Swenson, 11 Congress St., Trumansburg, NY 14886, (607) 387-6650.**

ZUCKERMANN HARPSICHORD KITS — A real challenge for the interested technician. Factory direct shipment at factory prices. Troubleshooting and advice for kit

prices. Troubleshooting and advice for kit builders. Authorized Agent: Yves A. Feder, R.T.T. Harpsichord Workshops, 2 North Chestnut Hill, Killingworth, CT 06417, Telephone (203) 663-1811.

FOR SALE

TWO MATCHED 1928 BALDWIN CONCERT GRANDS. Professionally prepared by Cliff Geers and Ben McKlveen. Ideal for college or performers. Artist benches included. Generous commission paid for information or assistance leading to sale. \$27,000 the pair or \$14,000 sold separately. Ben McKlveen, 6448 Graceland, Cincinnati, OH 45237(513) 531-3758.

CLASSIFIED ADVERTISING

NEW TOOLS. Precision, highest quality imported technician's regulating and tuning equipment. Send for free catalog and price list. Stegler Pianos, Technical Division, 12 First Ave. S.W. Oelwein, IA 50662. (319) 283-3691.

KEY RECOVERING MACHINES for sale. Prices on request. Send self-addressed envelope. Or, build your own — send \$15.00 for plans, photos, instructions (refund w/purchase of machine). Solenberger Piano Service, 1551 Lynn Court, Santa Rosa, CA 95405.

1903 STEINWAY B, Victorian legs. New soundboard, ebony finish, pinblock by Geers. New hammers, shanks, strings and pins by Ozark chapter. For pictures and info, call Ken Carter, (816) 886-3034.

FOR SALE: Exceptionally beautiful burled walnut grand, (6'x6"), by Schiedmayer & Soehne, Stuttgart. Completely restored and refinished. Photo and details on request. Roland Grittani (JR.), 427 Waterloo, London, Ontario, Canada. (519) 434-0027

SOMEONE WISHING to start own Piano Repair Service with complete shop and long established name in large area, call Dick Schmalz Piano Service; Days — (415) 783-4015, Evenings — (415) 278-0295, if not in, will return call. Business includes spray booth, compressor, strip tanks for complete refinishing, also office equipment. Business now located at 23673 Connecticut St., Hayward, CA 94545

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

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

PIANO TUNERS ARE GRAND AND UP-RIGHT PEOPLE. Send \$3 for this special 3½" x 15" bumper sticker in attractive calligraphy: Jacky Briggs, 1013 Fairmont Ave., W.E., Jamestown, NY 14701. WHIPPEN REBUILDING. Revive the "feet" of Steinway grand piano action. The piano action specialists at New England Piano Action Co. can completely rebuild and modernize Steinway Whippens at a cost far less than that of a new set. Other action rebuilding services available. Please write or call for more information and prices. New England Piano Action Co., 6 Vernon St., Somerville, MA 02145. (617) 628-1591.

HALE SIGHT-O-TUNER, 1 year old, works perfectly, \$260. Deagan tuning bar with case, \$30. Alan Pedrazzi, 7081 Elphick Rd., Sebastopol, CA 95472 (707) 823-2756.

THE BUSINESS OF PIANO TUNING AND REPAIR. A comprehensive text written exclusively for your piano tuning business and finances. "A must for every tuners library." \$12.50 ELREC INT., 3905 ARTIC No. 512 ANCHORAGE, AK. 99503.

KNABE CONCERT GRAND For rebuilding. \$3500 firm. (607) 754-0057.

WANTED

REPRODUCER/PLAYER TECHNICIAN desires wholesale customers for restored instruments and/or wholesale restorations. Registered Technician. M. Lynn Reid Pianos, 110 Highland Drive, Union, SC 29379 (803) 427-4714.

WANTED: MASON & HAMLIN GRAND. Want one that was a player. Have player mechanism to install. Maybe interested in Steinway, Chickering or Knabe X player. Brady, 4609 Cranbrook, Indianapolis, IN 46250, (317) 259-4305, after 5 PM (317) 849-1469.

NEED A METAL PLATE for Haines Bros. square rosewood grand piano. Ser. No. 14572, or will sell as is. Contact: Mary Jo Streb, 18 Commercial Dr., Iowa City, Iowa 52240.

WANTED — ORGAN TECHNICIAN full time for music dealer in sunny Florida. Write: Bobb's Pianos & Organs, 2512 So. 30 Ave., Hallandale, FL 33009, or call Mr. Bobb, (305) 456-7800.

WANTED: AMPICO TOP ACTION for a Marshall & Wendell Upright (c. 1920). Registered Technician. Ralph W. Day, 524 Dana Street #4, San Luis Obispo, CA 93401. (805) 546-2179, after 5 PM (805) 541-0802. Call or write.

HELP WANTED

PIANO TECHNICIAN NEEDED. Come to warm, prosperous Houston. Good arrangement with large dealer. Call Mr. Freeman, (713) 861-1100 between 7:00 & 8:30 A.M., Central time.

LECTURER/PIANO TECHNICIAN. Duties include complete responsibility for all pianos assigned to the School of Music. Must be qualified to service pianos in the following six categories: tuning, regulating, voicing, repairing, rebuilding and refinishing. May teach classes relating to piano servicing as time permits. Must be a member of the Piano Technicians Guild. A clear record of successful work based upon recommendations and record of service; apprenticeship and professional training is essential. Salary is dependent on candidate's qualifications and experience. This is a twelve month, non-tenure track appointment at the rank of Lecturer. Attractive fringe benefits and vacation package. Interested candidates should respond in writing by January 30 to Dr. Walter Watson, Director of School of Music, Kent State University, Kent, Ohio 44242.

MISCELLANEOUS

LEARN HOW TO REMOVE AND REPLACE SOUNDBOARDS YOURSELF.

New handcrafted soundboards supplied by: Victor A. Benvenuto, The Piano Shoppe, Inc., 6825 Germantown Avenue, Philadelphia, PA 19119. (215) 438-7038.

SIGHT-O-TUNER MODIFICATION AND REPAIR. Improve the accuracy of your machine from ± .5¢ to ± .1¢ by installing ten-turn Knobpot potentiometers. Save time, start setting perfect temperaments and super tune every piano you work on. A must when giving the new tuning exam. Package deals include two potentiometers, rechargeable battery system, oscillator and filter outputs, magnetic pickup and electric piano inputs. All repairs and modifications made within one week. David Pitsch, (801) 225-0156.

AT LAST! Tuning, technician courses at The Piano Shoppe, Inc., evening sessions. Victor A. Benvenuto, 6825 Germantown Avenue, Philadelphia, PA 19119, (215) 438-7038. Call or write.

SIGHT-O-TUNER REPAIR AND CALIBRATION SERVICE. Like all electronic instruments, the Sight-O-Tuner can and does get out of alignment. Recalibration can make a difference in your tuning. All work fully guaranteed. Includes retuning of active filter, cleaning rotary switch contacts and checking and adjusting power supply voltage. Am also equipped to do Steve Fairchild-type Sight-O-Tuner modifications. Write or call: Richard Weinberger, 14130 Alta Vista, Saratoga, CA 95070. Phone, (408) 867-4513.

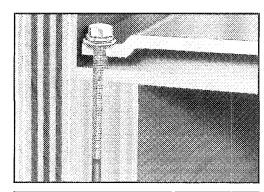
The Baldwin Piano... You can see why it sounds better

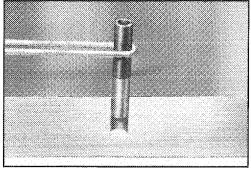
The precise setting of downbearing is extremely important to piano tone. Too much bearing inhibits tone because the soundboard cannot vibrate freely, while too little bearing does not provide good sound transmission. From our research we have developed a unique method of setting downbearing with a degree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

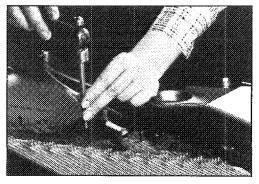
GRAND PLATE MOUNTING SYSTEM: Each mounting hole around the perimeter of the plate is threaded to accept a hardened steel bolt. This allows the plate to be set at the optimum height for bearing on the front side of the bridge (U.S. Pat. No. 3,437,000).

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).

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 restringing a section or an entire piano, contact Baldwin for the loan of special bearing-setting equipment.



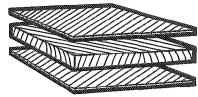




Second in a series of informative ads on piano tone published by Baldwin Piano & Organ Company exclusively for the benefit of piano technicians.

Baldwin. - Leading the way through research

BALDWIN SPECIAL SERVICE—You may order Baldwin replacement parts at any time our office is closed—nights, weekends, and holidays—by dialing direct (513) 852-7913. Your verbal order will be recorded on our automatic answering service and processed the next working day.



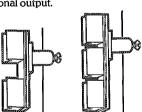
The grain of the wood in both top and bottom layers of the new soundboard runs parallel to the general direction of the treble bridge. The fine grain of the inside layer runs in the direction of the ribs.

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

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



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



Pencil point proves performance of new Wurlitzer Soundboard

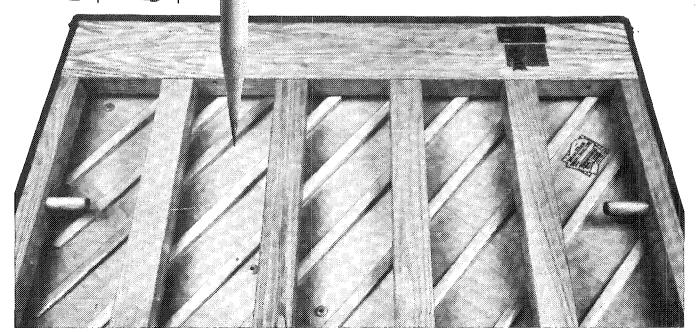
Wurlitzer's new all-spruce Duraphonic Multi-radial™ Soundboard transmits string vibrations more efficiently than any other. To prove its responsiveness, touch the point of a sharp pencil to any area of the board and strike a note as you hold the pencil gently against the surface. Test it top, bottom,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

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

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

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





Piano Technicians Guild 1982 February Update

December Chapter Mailing

Sent to the president of each chapter: Revised Guild Bylaws, Regulations and Codes

List showing official chapter seat for all chapters in the region

Request for any chapter seat change to be sent to the home office

New forms for participation in the 1982 Chapter Achievement Awards program

Cover letter from the Chapter Achievement Awards committee chairman Thomas Rodgers

Special message from the chairman of the Nomination Committee, Ernie Juhn

Certificates And Gold Seals

Certificates The engraved certificates for new Registered Technicians since the last 1981

distribution have been mailed showing the 1981 certificate date. Members classified before that previous mailing have already received a certificate. Only one is issued to each Registered Technician.

Gold Seals A gold seal bearing the year date will be sent to every Registered Technician with the 1982 membership card when annual dues have been paid. The seal can be placed over the date on the certificate to indicate that the member is a Registered Technician in good standing with the Guild this year.

Chapter Management Handbook

This handbook is to be revised and pending completion of the work some parts of the content are being reprinted in the UPDATE for those who are interested in this helpful manual. The first excerpt was printed in the January Update under the title MEETING PREPARATION.

Journal Donations

Eight historical issues of PTG Journal have been donated to the Guild by Dennis Kurk

:6:6:6

PTG Life Insurance

All Registered Technicians, Apprentices and Allied Tradesmen are automatically covered for \$1000 Life insurance, \$2,000 accidental death benefit.

Is your preferred beneficiary listed with the Home Office? If there has been a change since you first signed the insurance card please call or write for a new card to bring your insurance account up-to-date.

PTG Calendar

1000 duos are now duo

January		1982 dues are now due
January 2	3-24	Midwinter board meeting in Seattle, Washington
February	15	Closing date for receipt of proposed amendments to the Guild Bylaws, Regulations and Codes. Send copy to Charlie Huether, Committee Chariman
March	10	Closing date for receipt of nominations for Guild office. Send nominations to Ernie Juhn, Committee Chairman.
April	10	Chapters elect delegates and alternates to the 1982 Council session, Washington D.C. next July. Send completed credentials form to the home office.
		Closing date for receipt of completed delegate credentials forms for inclusion in the Council Agenda Book.
April	10	Closing date for receipt of Guild officers' and Guild committees' reports for inclusion in the Council Agenda Book.

Osvaldo Sasso President, Europiano Conference Ascona - 17th of December, 1981

To the Piano Technicians Guild c/o Charles Huether Secretary Treasurer

To you Mr. Huether, and all the members of the Piano Technicians Guild: I send best wishes for the year. My wish is that all will go well for you, especially those who were in Gwatt in May, 1981. Heartfelt Greetings,

> Heartfelt Greetings, Osvaldo Sasso Au Revoir till Paris?



Roland R. Likert, Jr., of Smiley Brothers Music Company in Detroit, Michigan, is trying to locate the following piano:

Young Chang G-157 (gloss walnut) Grand Piano #801029 w/bench.

The piano was sold to a Detroit Club, now out of business and there is reason to believe it has been shipped out of the area. If you have any knowledge of the whereabouts of this piano, please contact Mr. Likert, there is a \$100.00 reward for information on its present location.

Roland R. Likert, Jr.
President, Smiley Bros.
Music Co., Inc.
5510 Woodward Ave.
Detroit, Michigan 48202
(313) 875-7100

The New PTG Pin

The new Ptg logo pin has the words REGISTERED TECHNICIAN on a banner beneath the Guild logo. The new pin is available also as a tie tack. Both are \$5.00 each. The old design is also available but only on tie tacks and ti bars at \$4.00 each.

PTG Portfolios Available

Blue plastic portfolios with the logo in gold on the front are available for sale. These are especially good for local seminars and regional conventions. We have them at the special price of \$2.00 each (were \$2.50).

IN MEMORIUM

David Long
Carl Thomsen
George A. Young
Hiraoka Yoichi
Herman O. Perigo
William Walker

S.C. Pennsylvania Chapter New Jersey Chapter Nebraska Chapter Los Angeles Chapter Reno Chapter San Diego Chapter

New England Regional Seminar

FRI, SAT, SUN. AM

1982

APRIL 16, 17 & 18

The New Hampshire Chapter Presents-

"Piano University"

OUR DIVERSE CURRICULUM INCLUDES 21 CLASSES AT BOTH UNDERGRADUATE AND POSTGRADUATE LEVELS-THE STAFF OF INSTRUCTORS ARE THE "PROFESSORS EMERITUS" OF THE BUSINESS-EXHIBITORS GALORE!! FLEA MARKET-THE GREAT STUNT PIANO OF '78 LIVES AGAIN! SPOUSE PROGRAM-"MR. ANTIQUES", GEORGE MICHAEL, LECTURE AND AUCTION-A HANDWRITING EXPERT- AND MUCH, MUCH MORE!!

THE HILTON INN - at MERRIMACK
EXIT 8, EVERETT TRNPK.
MERRIMACK, N. H. 03054
(603) 424-6181

REGISTRAR-HERBERT BENEDICT R.F. D. 1, BOX 248 CONCORD, N.H. 03301 (803) 746-5805

PTG Correct Address

The Home Office discontinued the old post office box number for mail more than a year ago. Correspondence and packages addressed to PTG at the post office box number will be returned to sender.

Please send all mail for PTG to 113 Dexter Avenue North, Seattle, WA 98109

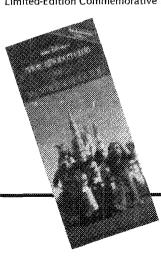
STEELAH GELEBRATION FOR MAGIORING DOMICEUP MEMBER:

Walt **Sisney World**®



100 FIRST PRIZES: (TEN PER MONTH)

Walt Disney World Tencennial Limited-Edition Commemorative Plate



5-NIGHT EXPENSE-PAID DELUXE VACATION AT WALT DISNEY WORLD VACATION KINGDOM IN FLORIDA

FEATURING ROUND TRIP AIR
TRANSPORTATION VIA EASTERN AIRLINES
AND UNLIMITED USE OF A CAR FROM
NATIONAL CAR RENTAL

EACH GRAND PRIZE WORTH OVER \$4,000!

ONE DRAWING PER MONTH FOR TEN MONTHS!

TEN CHANCES TO WIN!



500 SECOND PRIZES: (50 PER MONTH)

Walt Disney World Tencennial Collector's Edition Book



a year long and a smile wide

For FREE membership card and full details, write to the Home Office of Piano Technicians Guild, 113 Dexter Ave. North, Seattle, WA 98109.

Chapter Notes

The regular November meeting of the Cincinnati Chapter was held at Jim Campbell's residence and shop. Following the usual business meeting and round robin piano discussion conducted by our Vice-President, Ben McKlveen, we gathered in the basement shop where Jim Campbell literally performs miracles with wood and other materials. He requires these materials for the harpsichords he designs and builds. (This is the same Jim Campbell who draws the great illustrations for the technical columns in the Journal).

Jim demonstrated his method of making and covering keyboards and the traditional woods found in harpsichords was discussed and shown. He remarked that he travels from North Carolina to Canada to obtain wood to sustain his business. The basic differences between Flemish, French and Italian harpsichords were explained.

--Willard Sims Corresponding Secretary

Twenty-one members of the Cleveland Chapter along with seven guests, and five auxiliary took the express elevator to Don Dusenbury's Penthouse Workshop high atop the fashionable 1660 Building, in the heart of midtown Cleveland, to attend the November Chapter meeting. Since our attendance has been so good of late, I will dispense with the usual Hooray and Hallelujah but would like to point out that in the not too distant past, we have had periods where the combined

attendance of three consecutive meetings has not totaled thirty-three, and now we have that many at a single meeting!

Highlight of the business portion of the meeting was a presentation of a plaque (with clock) to Bob Russell Sr., to document the Chapter's appreciation for two years of exemplary service as international president of Piano Technicians Guild. Once again, thank you Mr. President!

Don Dusenbury gave an excellent technical session on wood refinishing using our project piano as raw material. It was a hands-on demonstration and many got their feet wet (literally). Thanks, Don, for a beautiful presentation.

The Ernie Juhn one-day workshop on November 15th was a tremendous success with thirty-six in attendance. Ernie, whose classes are as entertaining as they are informative, worked tirelessly from 11:00 a.m. till 5:30 p.m. and all marvelled at his wizardry both as a technician and a teacher.

A large and sincere thank you to Bill Mattlin and Dave Joseph of the Mattlin-Hyde Piano Co. for the use of their beautiful and spacious facilities. Also huge thanks to Janet Leary who was chairman of the Ernie Juhn Workshop.

Thanks to all of you who attended, and the biggest thanks of all to Ernie Juhn without whose genius the day would not have been possible.

-Al Metz, President

Dues

Dues payments are coming in very smoothly and we appreciate your cooperation.

Please send the original copy of the billing with your check for the full amount.

Please do not write notes on your billing statements, i.e. changes in your classification. When hundreds of statements are processed daily, notations on the billings are overlooked. A note on a separate sheet will receive quicker action.

Canadian And Overseas Members

Only checks in U.S. funds are acceptable.

Change of Address

The change of address cards are coming in and the Home Office is entering the changes in the Computer as fast as they come in. Some members have neglected to fill in their names on the card and show only the change of address or telephone number. If the card gets separated from the envelope, then the change of address cannot be entered because the name is missing.

Council Agenda Book Order

All chapters will receive a copy of the 1982 Council Agenda Book. The chapter is urged to encourage any chapter member who is interested to examine the Agenda Book. The book then should be given to the chapter delegate to bring to the Council meeting.

Any individual member who would like a copy of the agenda book should complete the form below and send it to the home office by April 5, 1982.

Please send me a 1982 Council Agenda Book. I enclose \$3.00 toward the cost of shipping and handling.

Name ______ Chapter ______

Address_____ State/Province _____ Zip Code ______