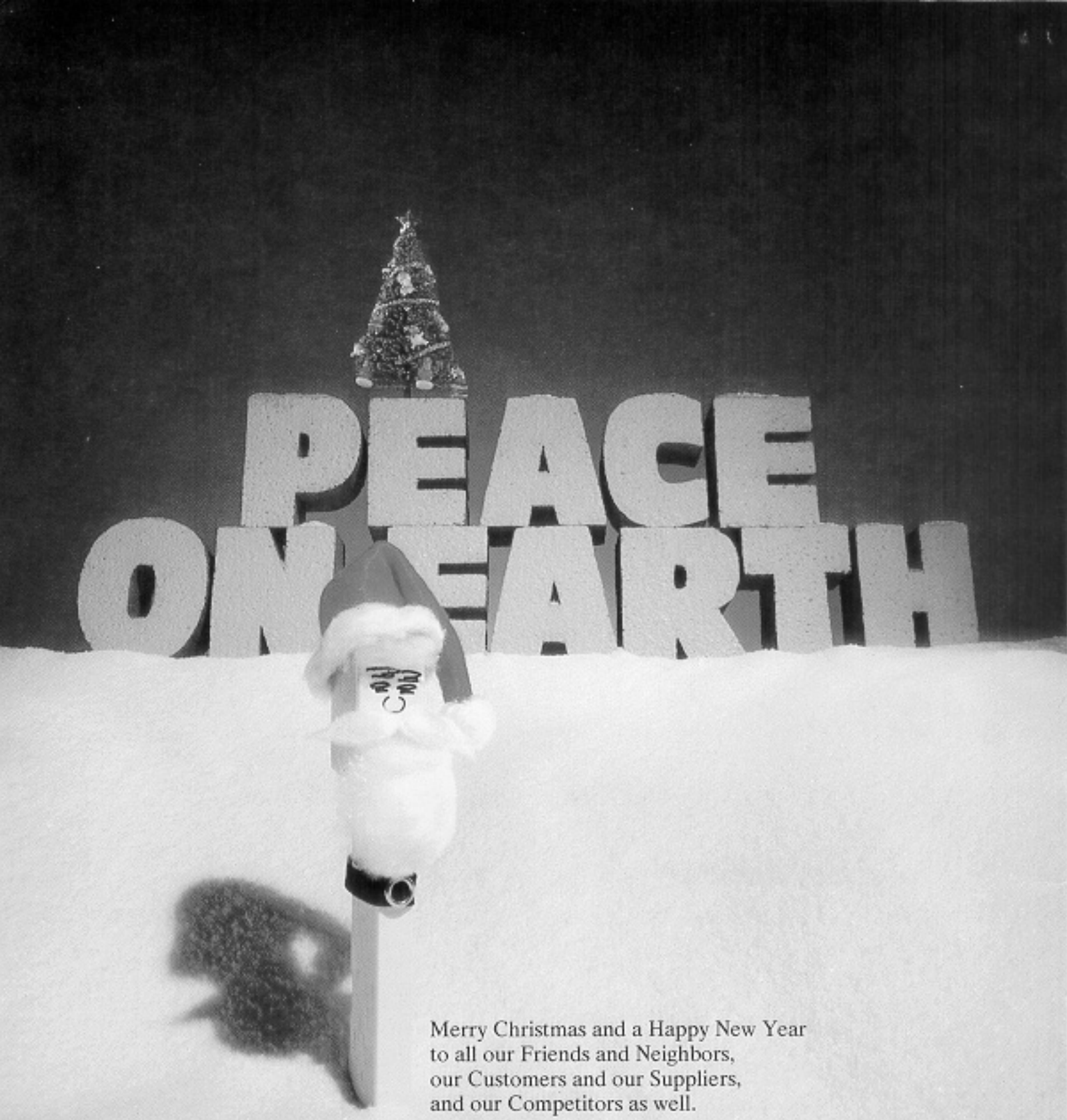
Piano Technicians Journal
DECEMBER 1980

Happy Holidays!



Merry Christmas and a Happy New Year
to all our Friends and Neighbors,
our Customers and our Suppliers,
and our Competitors as well.

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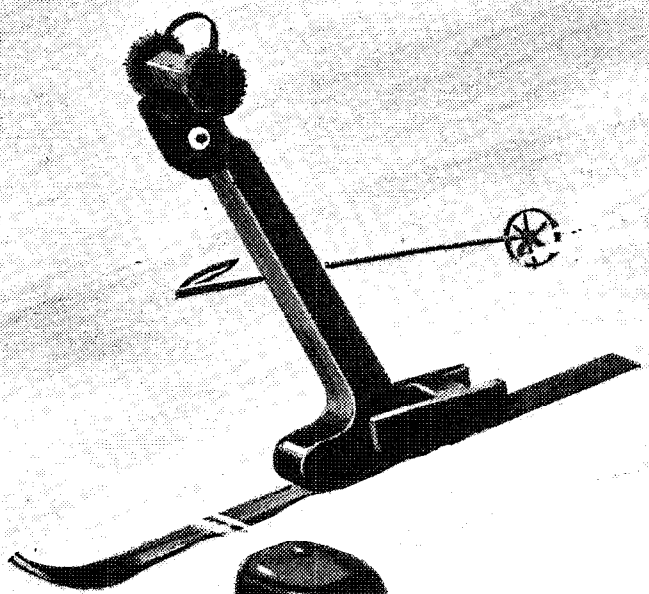
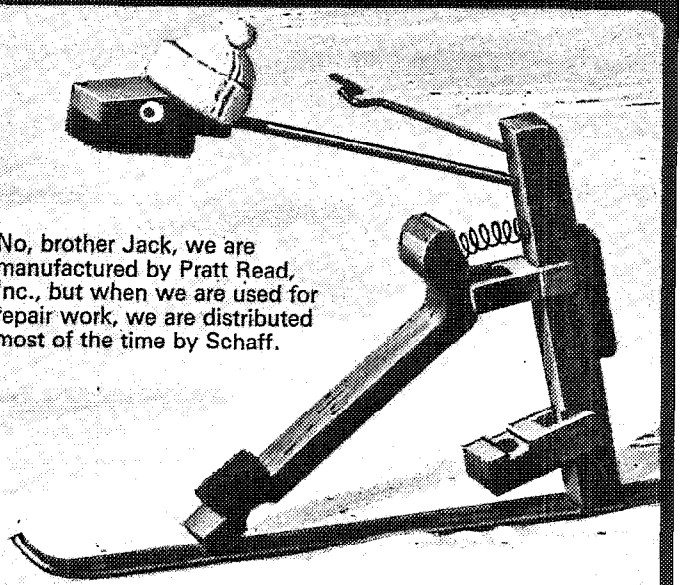
We wish you all a bright and happy future.

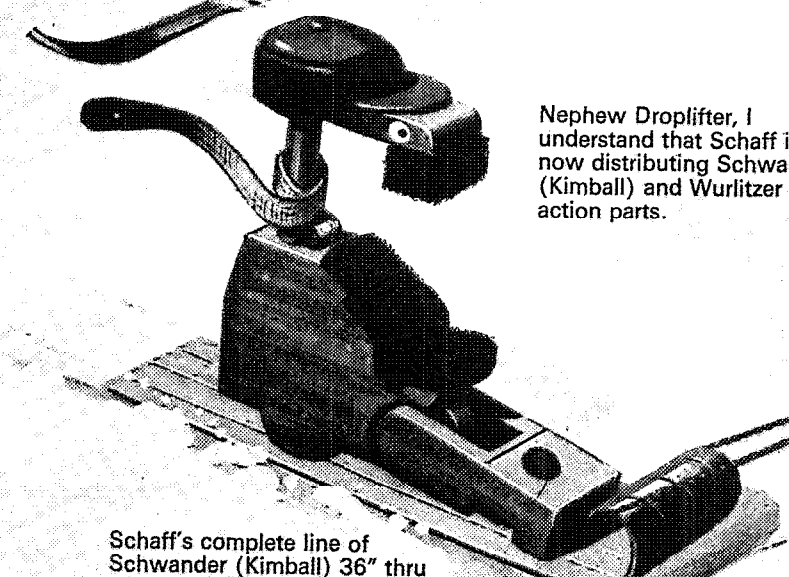
why is SCHAFF considered the action company?

My dear sister, Whippen, are we not in the wrong ad? Shouldn't we be on the page to our left?





No, brother Jack, we are manufactured by Pratt Read, Inc., but when we are used for repair work, we are distributed most of the time by Schaff.



Nephew Droplifter, I understand that Schaff is now distributing Schwander (Kimball) and Wurlitzer action parts.

Yes, Uncle Hammer Butt, when it comes to replacement action parts, Schaff always seems to be one step ahead of its competition.

Schaff's complete line of Schwander (Kimball) 36" thru 45" upright pianos and Wurlitzer A10, A20, A30 series upright pianos plus the 100 and 200 series Wurlitzer electronic pianos action parts are shown on pages 86 and 87 in the general catalog.

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Official Publication of the Piano Technicians Guild/December 1980 Volume 23 Number 12

Piano Technicians Journal

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COVER.. "The Look of Music," a five-month international exhibition of rare musical instruments at the Vancouver Centennial Museum in Vancouver, Canada. The exhibition, which runs from November to April, features over 330 pieces, including the two remaining Cristofori pianoforte (made by the inventor of the piano), the famous Clavichord by Hieronymous Hass of Hamburg, a 1534 Spinetta, Virginals, and a Hass Harpsichord.

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8 am-Noon
Friday

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EDITORIAL

Don L. Santy,
Executive Editor

Over the years, I have known and served many hundreds of organizations. Each has its own distinct and unique personality. I am constantly impressed with the Guild's rich history and dedicated membership — both past and present.

It is sad to see some of the old and valued members fading from the picture. They have made their mark and having done so move on. It is this mark — the individual contribution of a person in the industry — that **Ernie Preuitt** refers to in a recent letter he wrote to the home office.

He refers to a poem that has long been one of my favorites, and I have used it on numerous occasions in public speaking. It is all the more significant because as I sit up on my perch during Council sessions each year it is starkly evident that those who approach the chair to be heard are getting younger and newer to the profession. Here is RVP **Ernie Preuitt's** letter and I have taken the liberty to reprint the poem he refers to:

One of the most meaningful poems ever written was "The Bridge Builder" by Will Allen Dromgoole. It is the story of an old man building a bridge that he will never use, and he states that someone younger and weaker may pass that way, and he is building the bridge for him.

Isn't the Piano Technicians Guild somewhat like the poem? We have many older people who are still very active in Guild work. Almost to a man our past presidents, who have no ax to grind, are still active in many ways. Doesn't it do your heart good to see such men as Erroll Crowl and John Travis (though neither will admit to being old) still attending conventions, and still keeping active in promoting piano technology?

The bridges built by such men as Alfie Knight, Charlie Stein, and Len West will long be remembered by many of us who a few years ago were younger and weaker. Hal Lyne, who is also beginning to get a little older, still has that bridge building instinct and keeps on preparing for one who may stumble on the path.

So this message is directed to you, Mister Piano Man, who has not yet crossed over the bridge. Think a little about those who have made the way a little easier. Many of the advantages you now have were made possible by those before you even thought about being a piano tuner. If the local people are too timid to approach you, be a little brazen and approach them. There is a place for you in the Guild whether you're a beginner or one who has been in the trade for years.

Possibly we can't teach you a thing, so we would look forward to your teaching us something.

Sure, there are those who say they are not joiners, but not to want to be a part of an organization that is dedicated to your well being as well as that of the piano-owning public, is just not good, clear thinking. How else would you find out about new ideas, new working tools, new business procedures, new friends and a myriad of other things if it were not for such a group of people?

The Piano Technicians Guild is a great organization made up of the best people in the trade. Wouldn't you like to be a part of it? Come on, cross over the bridge.

— Ernie Preuitt

THE BRIDGE BUILDER
by Will Allen Dromgoole

An old man, traveling a lonely highway,
Came at the evening cold and gray,
A chasm vast, deep and wide.
The old man crossed in the twilight dim
The sullen stream had no fear for him.

But he turned when safe on the other side,
And built a bridge to span the tide.

Old man, said a fellow pilgrim near,
You are wasting your strength building here.
Your journey will end with the ending day,
You never again will cross this way.

You've crossed the chasm deep and wide,
Why build you this bridge at eventide?

The builder lifted his gray, old head,
Good friend, in the path I have come, he said,
There followeth after me today
A youth whose feet must pass this way.

This chasm that has been as nought to me
To that fair-haired youth a pitfall be.
He too must cross in the twilight dim,
Good friend, I'm building this bridge for him.

(continued on page 6)

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.

Those who built the bridges in the Guild will long be appreciated. This instrinsic heritage which they have so generously passed on down will always be promulgated by the indomitable Jack Sprinkle and his "Hall of Fame" program at each convention.

The past presidents awards, the Golden Hammer award and the many other recognitions bestowed on valued members each year will constantly bring their service into focus.

Sometimes older members, who have given so much of themselves, feel unappreciated or forgotten. Hopefully, they will understand that change is inevitable. Change is mostly for the good and is not necessarily depreciating or demeaning.

Most will appreciate that the bridges they leave behind them will be a constant and enduring reminder of their worth and contributions. They can be assured that the footsteps of those who follow will be safer, easier and steadier than they would have been with just the chasms to cross.

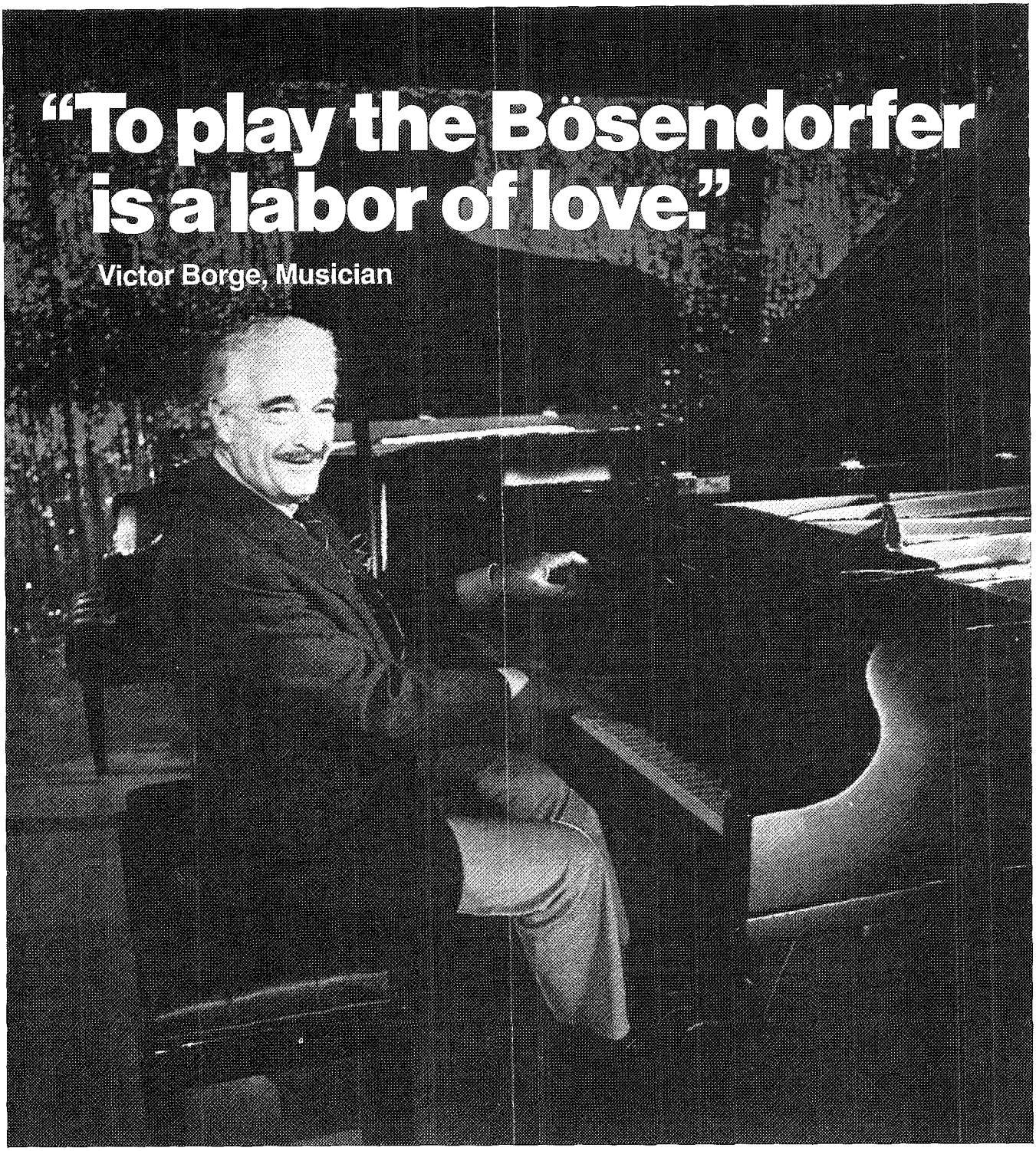
We are closing another year together, the Guild and I. This is the third year I have been privileged to serve you. I have had the pleasure of working under the direction of two fine presidents, Don Morton and Bob Russell. Both have given far more of themselves than could be expected of ordinary men and both have lived up splendidly to the great demands and expectations of the presidency.

Some of the friendships I have been privileged to develop I'm sure shall last a lifetime. An industry I knew little about has become a fascinating new interest. As time slips by, problems become fewer and fewer and the future becomes brighter and brighter.

The Piano Technicians Guild is on the crest of a great wave of progress and is fast becoming the major force for good in the industry — not only in this country but throughout the world. It is thrilling to see it move forward with such energy and enthusiasm.

My wish to you and yours this holiday season and for the year ahead is success in every way, renewed enthusiasm for your craft, increased appreciation for your many blessings and happiness and prosperity for at least the 365 days ahead. □

—Don L. Santy



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PRESIDENT'S MESSAGE

Bob Russell, President

For months I have tried to convey my thoughts and feelings on the need for us to progress in our profession — to progress in a technical way, a social way, and perhaps above all to mature to our greatest ability.

Progress can be compared to a car race. After a few minutes have passed in the race, the only way we can tell who is in the lead is by listening to the announcer. In other words, a person can be so far behind that it looks as if he is in front. This analogy can be carried further — are you among the leaders in the front group or are you the leader of the last group?

How do you determine what group you are in? Attend chapter meetings. Be alert; listen and ask questions whenever possible. Attend as many state and regional seminars as possible; attend the classes and take notes. Take time to learn and digest knowledge and then put it to use.

It is also wise to attend the national convention. There, you will come in contact with some of the best piano technicians in the world. And there, if you are truly honest with yourself, you will find out if you are one of the leaders or so far behind that you just seem to be in front.

Sometimes the technician is confronted with a situation where he says, "My customer won't pay that much for that special kind of repair." I assume this is meant to mean that the work is too good, too detailed, or perfect. What some of us fail to realize or remember is that piano tuning, repairing, regulating, and building is composed of compromising. Everytime a piano or action is made there must be a compromise.

But all of us must always remember that if YOU DON'T UNDERSTAND PERFECTION YOU CAN'T COMPROMISE INTELLIGENTLY.

If we change, just a little bit, a regulation from one that has already been changed, what chance do we have of reproducing a good job if we don't understand what the designer first had in mind. In other words if we try to regulate an action which has knuckles that are flat what real chance do we have for a fine job?

The same ideas can be related to tuning. One must know how to compare our work. We compare pianos, tunings, rebuilding, tone regulating, etc., from the very best that we know.

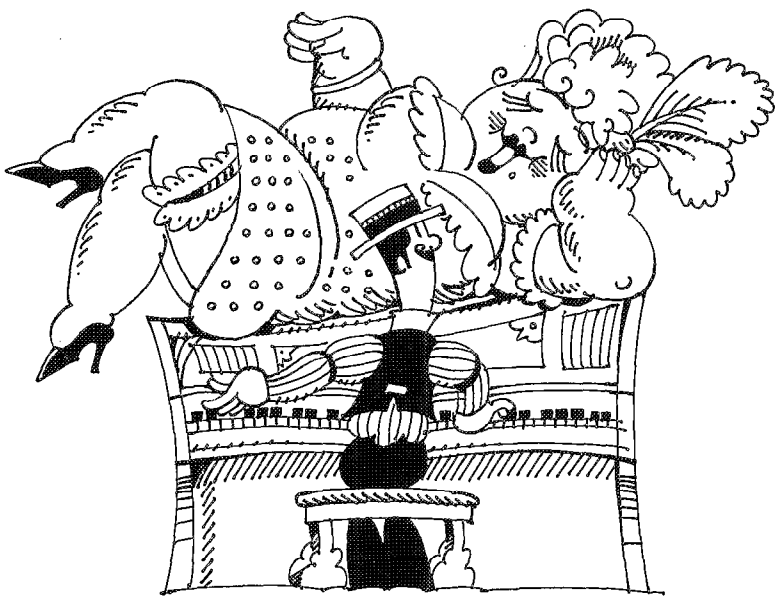
So, it is not only justifiable but necessary to understand the ultimate in pianos and their designs. When we service that little, old prewar spinet, we will understand and perform a service that is good for the piano, the customer, and our reputation.

Now that we are all convinced we must attend meetings and conventions, I have a super idea for the "perfect" Christmas gift.

Next year, immediately following the San Francisco national convention, the Guild will offer (optional) you the opportunity to go to Hawaii for a post-convention for 7 nights. These days, which will be divided between 3 islands, will also have time devoted to technical sessions. In this manner, with the technical sessions, this entire trip to San Francisco and on to Hawaii will be tax deductible for us, our family, and guests.

We have selected the Hilton tours to give each person a personal travel program from home to San Francisco, to Hawaii, and home. So begin immediately to save your pennies for the vacation convention of a lifetime!

Everlasting Everett.



The weight of time wears well on Everett pianos. That's probably why piano technicians keep finding old Everetts people want to keep tuned. And we think the pianos we build today will last even longer.

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We also proudly boast of a new management team dedicated to our growth. But with all that's new, we still have the same uncompromising dedication to craftsmanship.

So next time a customer asks you to recommend a piano, remember Everett.

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THE TECHNICAL FORUM

Jack Krefting, Technical Editor

SOUNDBOARD SHIMMING

As a logical follow-up to last month's discussion of rib refastening, we will spend a little time this month on the related topic of shimming. As has been pointed out many times before, the refastening of loose ribs is infinitely more important to the performance of the piano than the shimming of the cracks; still, if we are proposing to do a complete soundboard repair we should not ignore shimming. If nothing else, shimming increases the value of the instrument by eliminating unsightly cracks.

If our primary goal is indeed a cosmetic improvement, we should remember that the job must be done in such a way that it will not open up again. For this reason, it is necessary to follow a few basic rules when shimming.

The first rule to remember is that the wood will continue to respond to changes in humidity, alternately shrinking and swelling with the weather. It stands to reason that if we cut and fit a shim into a crack that is swollen partly shut already, it will certainly crack open again during the dry season. We must dry the board and the shims as much as possible without destroying glue joints.

The second rule is a more practical one, involving basic woodworking skills: Be certain that the shim fits exactly, all along its length and all the way through the board. If it fits well only at the surface of the board it will not be solid enough to withstand the stresses and strains imposed by climatic changes.

Standard supply-house shimming knives are available in two configurations, narrow angle and wide angle. These can work well in certain situations, but their limitations must be known and understood by the craftsman. First of all they must be ground so they will cut the crack, not simply spread it out, and that means they must be sharpened periodically.

Another thing to consider is that the angle of the tool sometimes doesn't match the angle of the shims. This must be corrected, either by grinding the tool or making shims to match the tool angle, or there will be voids in the glue joints. In **Figure 1** we see the basic relationship of the shim to the cut crack.

Another thing to consider when using a standard shimming tool is that, because it is pointed, we cannot cut below the level of the bottom of the board without also cutting the ribs. It is very important that the shims go all the way through the board, and the standard tool will take us that far— but only just that far, with no allowance for error.

If we cut the crack open for a perfect fit of a standard shim using a standard shimming tool, we must accept the weakness of two glue joints approximately one whisker-width apart right at the bottom surface of the soundboard.

To me, this means that the

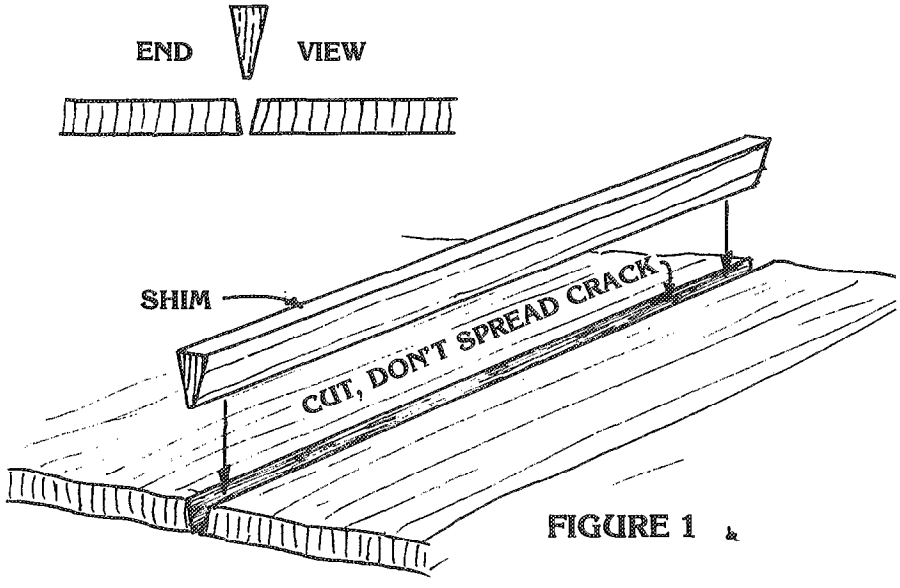
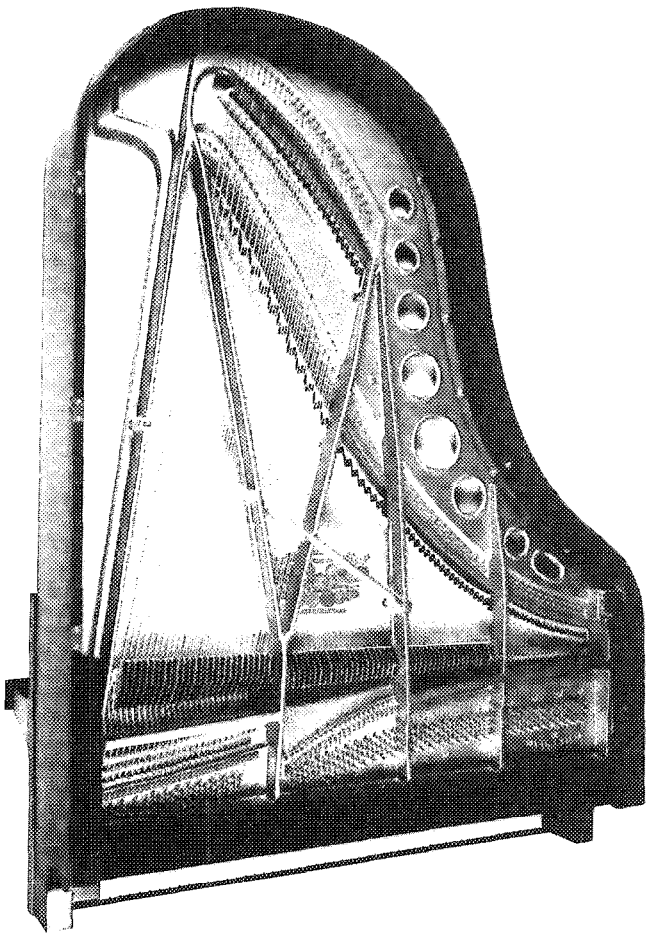


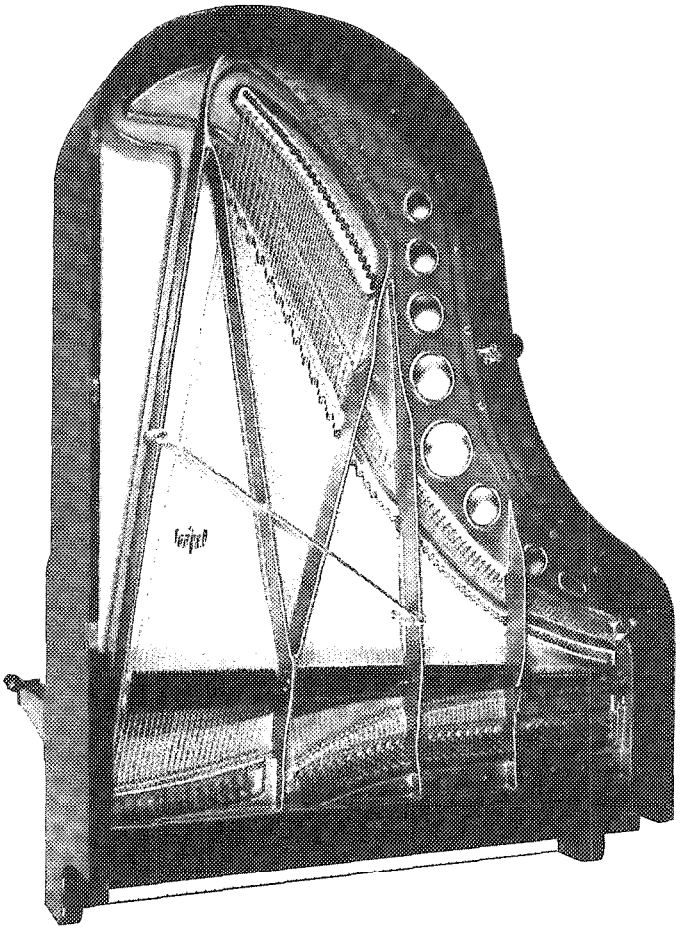
FIGURE 1

The Resemblance Is Obvious!

The Kimball 6'7" Grand



The Bösendorfer 6'7" Grand



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standard tool is adequate only for hairline cracks, not substantial ones. Certainly if you can see the floor through a crack, it is wide enough to preclude the ordinary shimming methods and materials because a pointed tool cannot cut the crack to the prescribed angle all the way through the board without cutting the ribs.

Figure 2 illustrates a proper shim for a larger crack. This shim would be at least ¾" high, quarter-sawn of well seasoned, clear dry spruce. The angle is optional and may be altered to match the angle of the available tool which cuts the crack in the board, at least within reasonable limits. The narrower the angle, the greater the wedging effect of the shim; conversely, the wider the angle, the less downward deflection is necessary if a wide spot in the opening is encountered. The craftsman must make a compromise, as usual, and some common sense would not be detrimental in such an instance. As shown, the shim should be carefully notched out to accommodate the ribs. The intent is to replace wood that is missing, both in the crack and where the board would normally contact the ribs.

A straight-ended shim works well at the bellyrail and in a nose-bolt hole, but otherwise it is usually advantageous to smoothly blend the shim into the board. If a standard shimming tool is used, the normal result will be a tapered opening, with the end of the crack narrowing down to a point. If this method is used, the shim should be shaped to fit as shown in **Figure 3**. The ends may well resemble the prow of a wooden ship, which is fine if this conforms to the shape of the cut.

It is important that the board be thoroughly dried so that all cracks will open to their maximum dimension before shimming is begun. This is usually done by covering the grand piano with moving blankets and placing a heat source underneath the instrument. The shims are dried at the same time by being laid on the board, and the heat is kept on during the refastening and shimming processes.

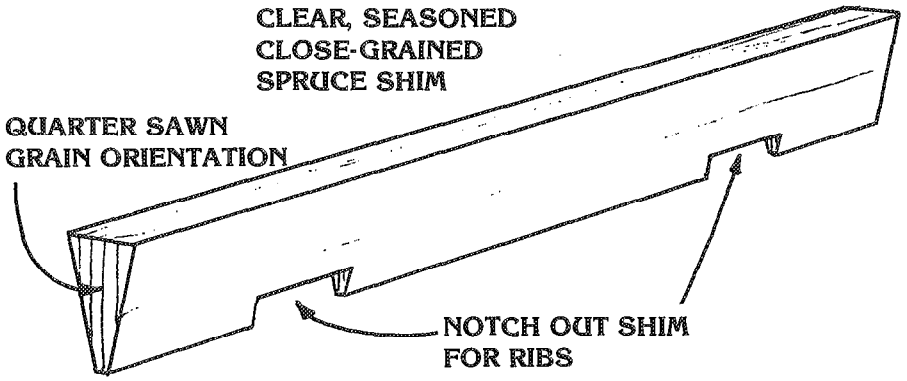


FIGURE 2

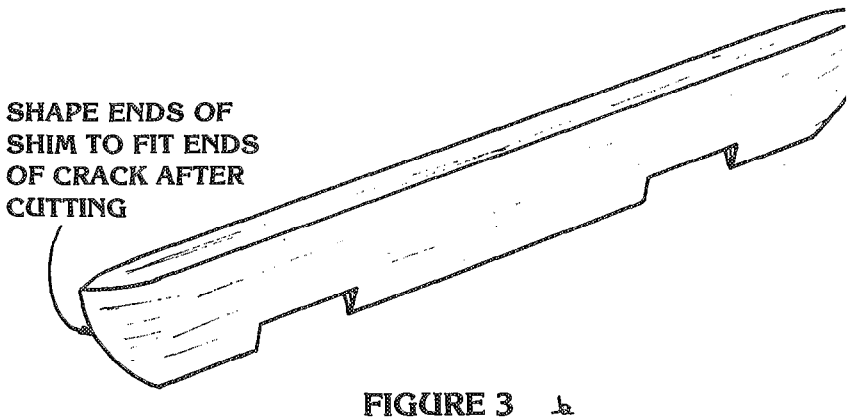


FIGURE 3

How much should the board be dried? Observe the ends of the cracks, which will be dirty inside because of the accumulated dust over a period of years. When the board has dried to the point of showing white wood at the ends of the cracks, the technician knows that the board is drier than it has ever been since the original compression. Shimming should begin at this point.

All cracks should be cut and fitted to shims while the heat is on, because if one shim is glued before the others are fitted, the moisture from the glue will cause the board to swell and partially close the other cracks. If the shims are all glued at once, pressed in by weights or go-bars as shown in **Figure 4**, the result will be that the swelling of the board will simply help to clamp all of the glue joints. As soon as this is done, the heat may be removed.

The heat source may consist of just about anything. Cliff Geers uses three 750° strip heaters bolted to a steel plate, supported by concrete blocks for fire safety. I use a very small thermostatically controlled space heater which automatically shuts itself off if kicked over.

In winter, I have simply rolled the piano over a heat register in the floor of the shop. Any heat source that will open the board without causing a fire will do the job, and of course the amount of time the heat must be left on depends on how warm the heater is and how dry the board was to begin with. It could take two days or two weeks.

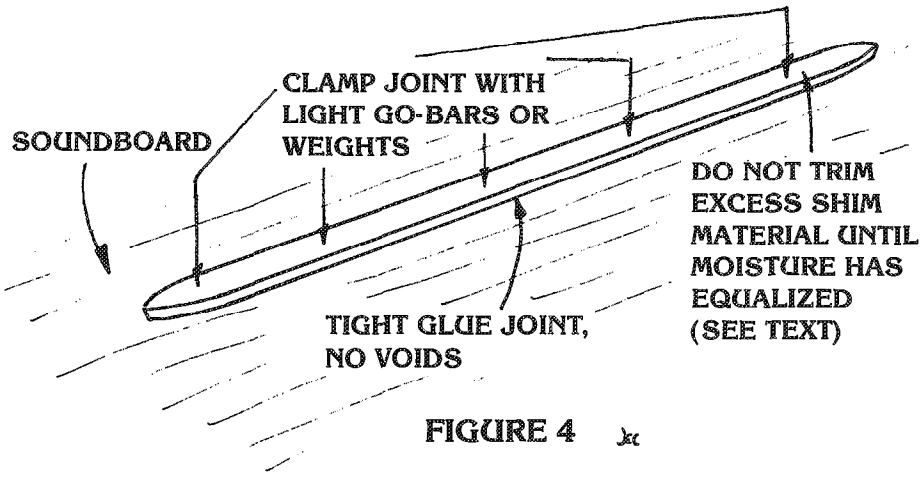


FIGURE 4

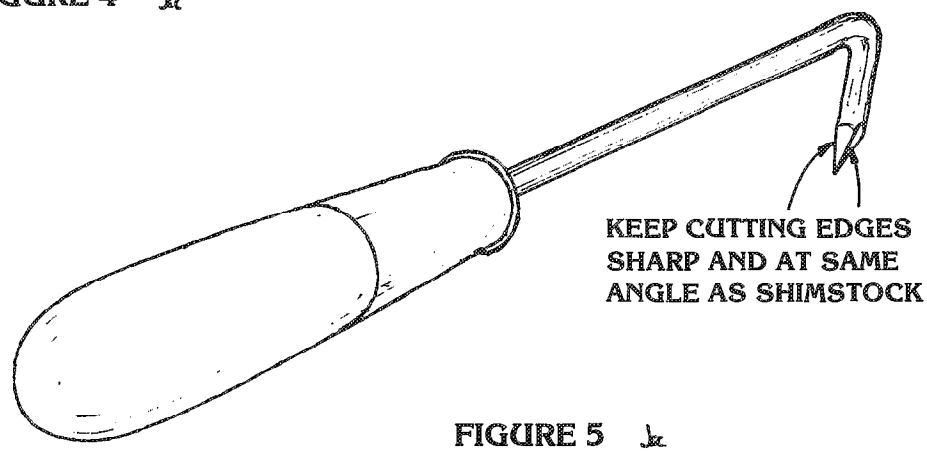


FIGURE 5

Figure 5 shows the standard supply-house tool for cutting the cracks, which is suitable for "beauty shims" and very fine cracks as discussed earlier.

For larger cracks or for removing a strip of the soundboard, another method must be found. One such method is to cut the crack by hand using a very sharp knife guided by a steel straightedge clamped to the board. The difficulty here is in maintaining a consistent angle, which must be done if a good joint is to be made.

Wherever there is a compression ridge or a series of branching cracks, it will be nearly impossible to shim by following the cracks. In such instances it is necessary to remove a strip of the board by making a straight cut without regard to the wavering of the grain. Power tools can be the best answer because, properly used, they can do the job more quickly and accurately than one could hope for with hand tools. **Figure 6** illustrates one way to secure a wooden fence to the soundboard. This will be used to guide the router in making a straight cut.

Finding the right tool can be difficult. A Moto-Tool isn't powerful enough, although a tapered bit which will fit its ⅛" collet is reportedly available from Dremel dealers and some technicians have reported some success with it.

A better tool, devised by Cliff Geers several years ago, is the router motor with a right-angle attachment shown in **Figure 7**. A

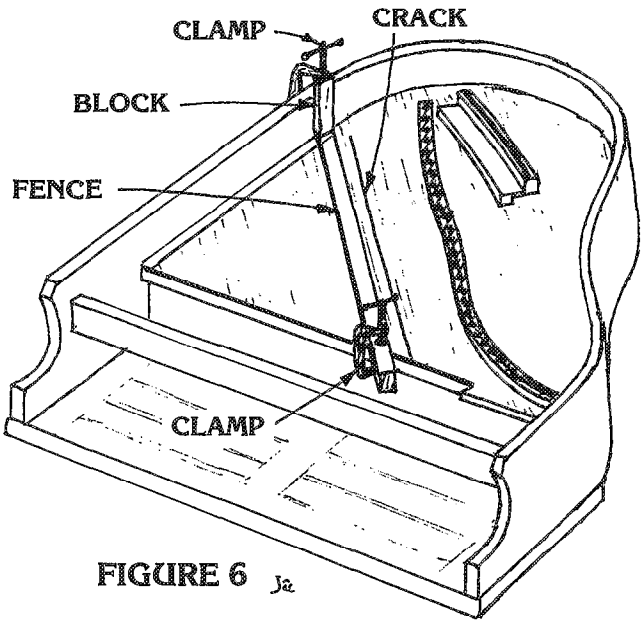


FIGURE 6

special cutting wheel with many tapered teeth was made for this tool, which worked quite well except that it was dangerous to use and wouldn't get close enough to the bridges.

Cliff's latest tool, shown next to the router in **Figure 7**, is a Rockwell air-powered laminate trimmer. This tool cuts a perfect tapered slot in the board with a bit readily available at Sears, Roebuck & Co.

Still another solution to the problem is shown in **Figure 8**. With this method, an ordinary router with an ordinary straight bit is used to cut a slot most of the way through the board. A straight shim with rounded ends is then made to fit and is glued on all sides and on the bottom.

This method has the advantage of more gluing surface for the shim, but cannot be fitted as tightly as a tapered shim. It also leaves a visible crack in the underside of the soundboard, which is bad enough on a grand but unacceptable on a vertical.

The best method, in my opinion, involves the use of tapered shims which go all the way through the board and fit tightly everywhere. Occasionally, we hear of someone shimming both sides of a board, the implication being that this is somehow twice as good as shimming only one side. If we think about that a little, we can see some real problems.

For one thing, if the first shim was fitted properly there would be no room on the other side for a second shim; in fact, the first shim should project through the other side to the extent that it should be trimmed on both sides. Then we will have one solid piece of wood and two thin glue lines, rather than two pieces of wood, four glue lines and a probable void in the middle.

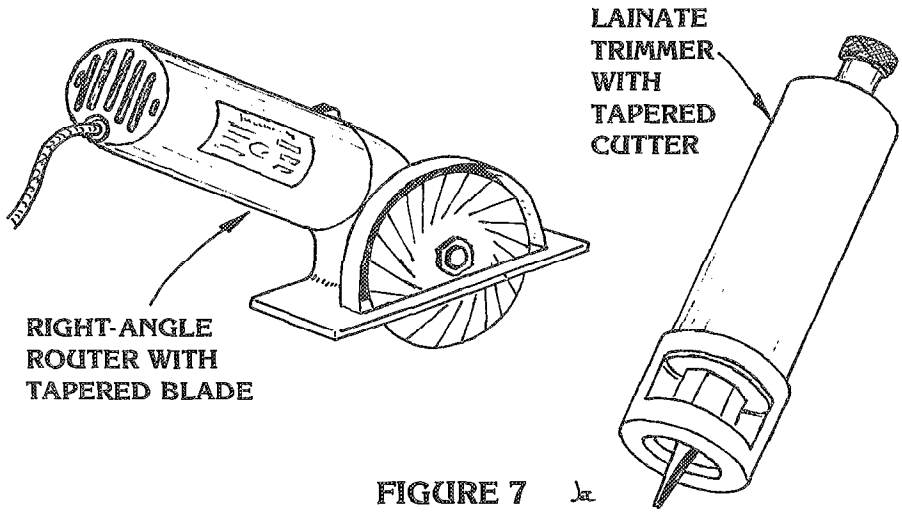


FIGURE 7

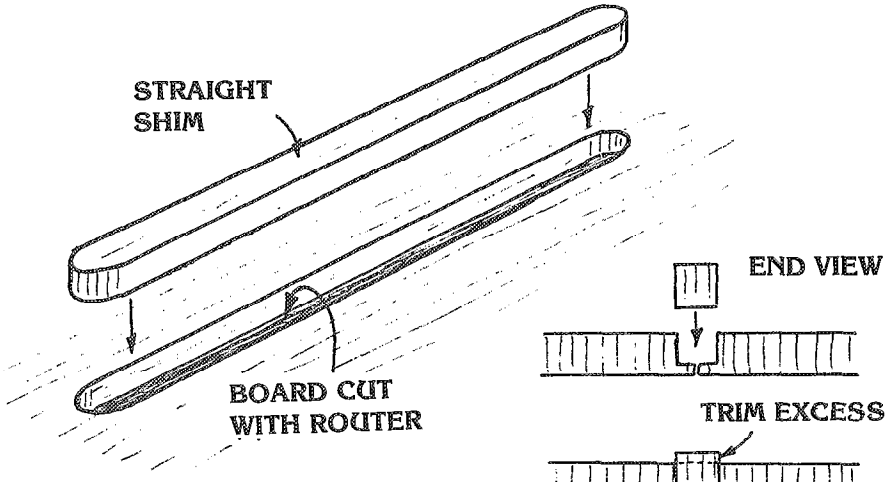


FIGURE 8

If we shim all the way through, with the wood dried down to its practical minimum dimension before gluing, we will have the best chance that the board will never open up again.

It is important to remember that glue contains moisture which causes wood to swell up temporarily in the vicinity of the joint. Before trimming the shims, the craftsman should wait until this moisture has dissipated and the swollen wood returns to normal dimension. If shims are trimmed too soon, the glue joints will sink below the surface of the board when the moisture leaves the wood.

A sharp chisel is needed for trimming, which should always be done in the direction of the rising grain; otherwise, the shim may splinter and break below the level of the board. This is important to consider when fitting the shims, because sometimes the edge of the rim gets in the way of the chisel. The higher grain should always go toward the obstruction.

If the technician has inadvertently glued a shim in backwards, it is still possible to trim it at an angle from the side by using short semicircular strokes with a very sharp chisel.

STRING SPACING

QUESTION: *"In an upright piano, you state that the strings be properly spaced on the vee bar for correct damper action. In a piano I am servicing, when I try to space the strings they slide back together, especially in the lower tenor section. I guessed the pressure bar was not tight enough, but when I observed it, I saw the pressure bar began ¾" above the vee bar in the high treble, but by the time it reached the low tenor, the pressure bar was approaching being over the vee bar.*

What does one do if the strings will not stay spaced? And what can I do with this piano? Would this be a warranty repair?

In the piano in question the strings are so close that the damper will not fit between them. If a damper seems to have too blunt a tip to fit properly, is it proper to sharpen it? Should a technician mess with the pressure bar? I never have!" — **Anon.**

ANSWER: Wherever bichord or trichord wedge felt is used, it is essential that string spacing be accurate. If the strings have a tendency to move on the vee bar, such dampers cannot work properly.

In the case of a bichord wedge, even if the tip were sharp enough to seat between the strings when they moved closer together, the damper regulation would be adversely affected because the top of the damper assembly would then be closer to the spring rail than normal. That means the bottom of the damper lever would be closer to the strings, so that particular damper would suddenly start picking up later in the cycle, whether with the pedal or with the key.

As our correspondent has guessed, it is quite possible that the pressure bar is not tight enough; in fact, I would say that is the most likely cause of all. Other possible causes would include erratic spacing between tuning pin holes, usually caused by an error at the foundry, or an irregularity in the surface of the vee bar.

Let's consider the position of the pressure bar. In the high treble there is always plenty of room for it, but in the low tenor there isn't much room at all. Some pianos have bichords here even when the designer would have preferred trichords for that particular scale, simply because there wasn't room for the extra tuning pins.

In order to provide some working space for the technician when replacing a broken string or even tuning the piano, it is sometimes necessary to place the pressure bar lower in the tenor than elsewhere.

The closer the pressure bar is to the vee bar, the more critical is its in-and-out placement. If too close to the plate, the bar would cause tuning difficulty because of the added friction; if too far away, the pressure bar would not give enough counterbearing for a clean sound and reliable string spacing.

If the pressure bar is further above the vee bar in the high treble, that also means that it should be screwed in further in order to maintain the same angle of counterbearing as the tenor.

Stated another way, the counterbearing angle (the amount the string bends toward the plate as it crosses the vee bar from the speaking length) must be sufficient to maintain spacing and prevent false beats, while at the same time not be so great as to create excessive friction or resistance to rendering during tuning.

This angle can be checked by removing the action and placing a thin piece of drill rod or other metal over the vee bar and under the pressure bar. Check it in the high treble, mid-treble and tenor. If the rod projects further from the speaking length in the high treble than in the tenor, the pressure bar may need to be screwed in further in that section.

Remember that the thicker the rod, the more apparent difference there will be when making this comparison. To really get an accurate reading in terms of a precise angle, the test rod would have to be the same diameter as the strings in that section. However, we are less interested in a specific number than in an overall comparison. In any case, if the strings under the pressure bar are almost touching the surface of the plate, there is little that can be done.

Do not attempt to tighten the pressure bar without lowering the tension, because the screws will break off. If it has been determined that the pressure bar must be moved toward the plate, relax tension and tighten each screw in that area by the same amount, checking results with the test rod.

When it appears to be correct, pull one or two of the offending unisons up to pitch and check for results. If they will stay at the correct spacing, chip the entire section and tune.

While the tension is down, it is always tempting to take advantage of that situation by adding a film of petroleum jelly to the vee bar and pressure bar for easier tuning. Whether I would do this, would depend on why the spacing problem had surfaced in the first place. If it was because the pressure bar simply was too far out, fine. A bit of lubrication might help. But if the spacing problem appears to have been caused by tuning pins which were incorrectly spaced, then the lubricant will defeat the purpose of tightening the vee bar.

This can be checked visually before the tension is lowered. Look at the wires of each unison as they come off the pin toward the pressure bar. If the wire from the top pin is touching the coil of the center pin, or some similar slight misalignment either way is observed, then a certain amount of friction at the vee bar is needed to maintain spacing. I would prefer not to lubricate in such an instance.

If the technician prefers to simply sharpen the point of a piece of wedge felt, this can certainly be done. Remove the damper head and squeeze the very tip with pliers or a vise, or lightly hammer the points on an anvil. This will compress the tip for clearance between strings, but remember that compressed felt has a tendency to be noisier and less efficient than softer felt. There is a limit to what can be done with this technique.

Regarding the warranty question, I would advise checking with the manufacturer to see whether he would consider this a warranty

repair. My guess is that it would be covered because the damper won't work, but not because the strings don't look good when they are spaced so closely. If that spacing does not adversely affect the performance of the piano, such as might be the case higher in the scale, the maker might well decide that there is no defect and therefore no warranty coverage.

Before performing any warranty work, be sure to get permission from the dealer that sold the piano so you can be sure of getting paid for your work.

TECHNICAL TIPS

Our first tip comes from **George Defebaugh**, by way of the *Cleveland Chapter Newsletter*. **Janet Leary** took notes during George's lecture, which included the following tip:

"When hanging hammers, put some Titebond in a small jar (amount needed to complete the job). Leave the cap off and let it sit overnight. Some of the water in the glue will evaporate, leaving it about the consistency of molasses. This eliminates the problem of warping hammers."

During the same lecture, George discussed action speed and advised technicians to thoroughly go over all possible friction points in the action. Burred capstans should be smoothed, action centers should be checked for proper torque, and knuckles may be lubricated with talcum. According to George, elimination of excess friction can take as much as 10 grams off when measuring downweight.

Our next tip comes from **Bob Musser** of Grand Junction, Colorado. Responding to a letter written by **Yvonne Ashmore** which appeared in our July 1980 issue, Bob suggests that if alcohol were added to the water in a 1:1 ratio, the iron would not be needed to remove the old felt. Bob goes on to say that he uses alcohol to soften the glue when removing a bass bridge. He then teases the bridge off with a spatula.

Dick Truax, writing in the newsletter of the South Central Pennsylvania chapter, reports on a tidbit of information gleaned from Fred Drasche's class in Philadelphia. The question was what to do about verdigris, and Fred reportedly pointed out that the size of the holes in the hammershank of the Steinway grand are exactly right to receive the smaller of the two sizes of teflon bushings. This might be a suitable alternative to rebushing or replacement of shanks for those who are comfortable working with teflon.

TIP OF THE MONTH

Herman Koford has written to us again, this time with a good idea for a curved hammer file. His idea, illustrated in **Figure 9**, involves the use of a piece of thin sheet metal which is folded in such a way as to hold the sandpaper without glue. This curved file allows the technician to dress the undersides of upright hammers without removing the action, which is particularly useful for spot-voicing on a spinet. We thank Herman for this and his many other contributions.

JOURNAL CONTENT

Now and then we receive thoughtful letters from readers on the subject of what should (and should not) be published in the *Journal*. Two such letters appear here:

Dear Sirs:

"I read the **Piano Technicians Journal** *with avid interest. I am a career Coast Guard officer aviator and enthusiastic part-time piano technician. I completed a piano technician correspondence course primarily to enable me to tune and regulate my Yamaha baby grand.*

"I have since rebuilt and refinished a nice 1925 Haines Bros. upright and a Howard (Kawai) baby grand.

"I refuse to work on someone else's piano because I do not feel that I am professionally qualified. I prefer to buy a piano and work on it for 6 or 8 months so I can do the things I know how to do to perfection.

"I have read every book on the subject of piano repair I can get my hands on, including, I think, all the standards. There is one subject about which I have found it extremely difficult to find any clear, concise, definitive information. There is in this entire county only one man who is a true **expert** *in this esoteric subject, and he is not interested in wasting his time explaining things to a young whippersnapper like me! I realize that I am an inexperienced amateur but I will bet that there are a lot of experienced rebuilder-technicians who read your* **Journal** *who would love to read a regular column on the* **art** *of finish repair.*

"I am not talking about the generalized explanations one can find in any library book on refinishing. I have read a dozen. I am interested in the real nitty-gritty of how to **repair** *an existing finish, how to blend stains and*

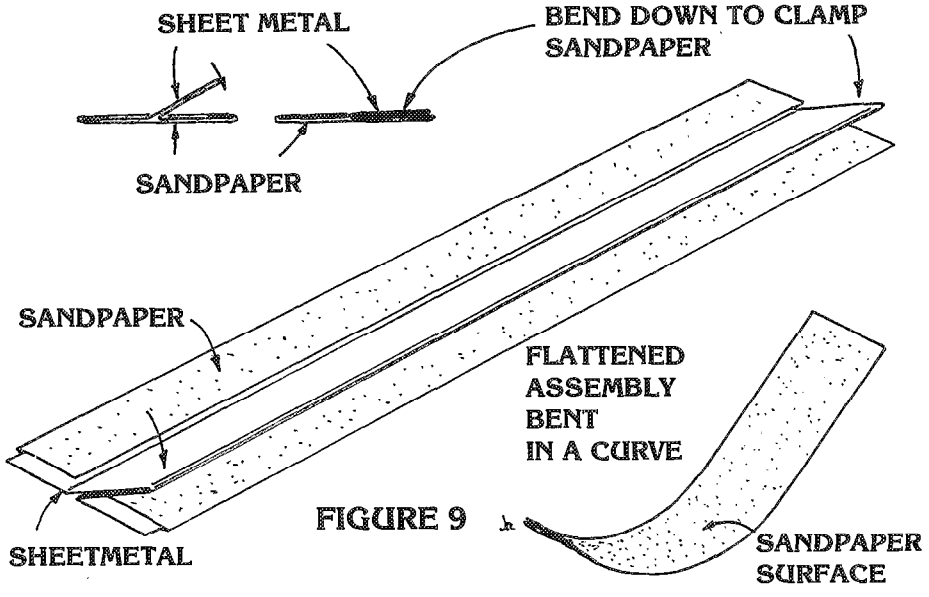


FIGURE 9

then fake a grain in a walnut top, whether or not to use a lacquer sealer over a lacquer stick melt patch before spraying. My Howard baby grand had a 2-square-inch piece of veneer chipped out of the top front edge. The finish is polyester with a polyurethane coating. I spent 50 hours on that 2 square inches! It is still visible from 20 feet away if the light reflects off the top.

"I telephoned the C. A. Geers Co. (spotted their ad in the **Journal***) for help and talked to the refinisher. He was* **very** *helpful, and it was a good feeling to realize that piano technicians in general are more than happy to pass on their secrets to a willing novice.*

"There are not many people around who understand the chemical complexities of the new piano finishes and how they relate to well established repair techniques and compounds, e.g., can you pumice and rottonstone polyurethane? I think a column on this subject would be well received.

"Thanks for a fascinating journal. I pounce on it every month." — **Richard Buhl**

Our second letter is from Mark Anderson of Washington, D.C. Mark is not in agreement with Roy Howard (July 1980 issue, page 14) that the *Journal* needs a comic series, but would like to see more serious letters to the editor. We agree. Mark goes on to say:

"... I have been enjoying the series by Dave Roberts. How about running a series on Salesmanship, Building Special Tools, Organizing Tools for Maximum Efficiency, or How to Promote the Guild in Your Area ..."

In another paragraph, Anderson makes reference to the new tuning exam:

"... The new tuning exam standard is fine, but the vast majority of schlock-work is found on repairs. Complaints generally do not come from tuning. What the Guild needs is a more rigorous repair and rebuilding exam. Skill at changing a string does not imply skill at restringing an entire piano ..."

IN CONCLUSION

We are always happy to receive comments, questions, articles and technical tips from our readers. The tecnical format of the *Journal* is generally representative of what we think our readers want, but is by no means inflexible. If you would like to make a comment or contribution, please write to me at this address. Jack Krefting, c/o Baldwin Technical Service, 1801 Gilbert Avenue, Cincinnati, OH 45202. □

VACUUM LINE

Raye McCall

The last time this column appeared, it contained some discussion about field-oriented service. Since that time some letters have arrived bearing questions which need to be addressed.

To those who have written submitting questions or suggestions: Thank You!

When the "Vacuum Line" made its debut, the subject of that first writing was the theory of operation of the player system. The importance of the need for a thorough understanding of this subject should, by now, be very obvious. Understanding is basic to being able to do an efficient job of troubleshooting.

An essential part of the player system is the bleed. It must be there; it must be the correct size; and it must be kept open. Should it become plugged, a malfunction will immediately occur.

In the case of a standard-type tracker, the double pneumatic will move the paper all the way to one side and there it will remain. I have found this situation twice in as many days during the past week.

This brings into sharp focus again the need for carefully instructing clients in the "proper care and feeding" of their player piano and the rolls they have.

The most common material that plugs bleeds is lint from the rolls drawn in through the tracker bar. Cleanliness is extremely important to the proper function of the player piano. There is a very good chance that the only time it may get cleaned is when a technician services it. Therefore, the cleaning should be a regular part of the servicing procedure.

I have another contribution from Tom Harr. Tom has written before, so now is in the treasured category of "repeat customer." He has two questions this time. The first one is about the automatic shut-off on the Aeolian players.

There have been about four different systems used on these pianos. When discussing a problem, it must first be determined which system is on that particular piano.

Tom's question refers to the delay system which gets its signal indirectly from the tracker bar. The signal goes from the tracker bar to the valves on the shift or reroll pneumatic and occurs at the end of play.

At the same time that the reroll pneumatic collapses, vacuum is also supplied to the small, automatic-shut-off pneumatic. Simple logic maintains that there is a signal given for the electric motor (pump) to shut-off at the end of play. The reason it does not occur at this time is because there is a small brass bleed installed inside the little shut-off pneumatic which restricts the flow of vacuum, thus preventing shut-off before reroll begins.

As soon as reroll is completed, the signal is given again, but for a longer time, so that the vacuum now overcomes the bleed, collapses the small pneumatic which pushes the button to shut off the electric pump. Everything that is a part of this small pneumatic must be absolutely air tight, otherwise it will fail to function.

If it will not work properly, attach a tube to its nipple with the other end in your mouth. If you are able to draw any air at all through this tube, then take the pneumatic apart, make sure the bleed is open, and recover the pneumatic.

Tom's second question concerns access to the action and keys in Aeolian players. This is probably one of the most difficult tasks to perform.

If you are to maintain your sanity (assuming you were when you started!), you will require a certain amount of patience both with yourself as well as the instrument, some perseverance, and a willingness to learn and follow the steps which are commonly referred to as the correct procedure. They are as follows:

1. Extract the wind (air) motor from the piano.
2. Remove the music box brace screw(s).
3. Disconnect the tempo linkage under the shelf at the bass end of the piano. Also either protect the bass cheekblock or remove it so it does not get damaged
4. Remove four screws — two each from the bass and treble ends of the shelf.
5. Remove anchor nuts by the roll box.
6. On some models there are brackets through which the tubing passes. Either remove the tubing from these brackets or take the brackets off. If you decide to do the latter, you will be faced with the challenge of getting at the screws.

Standing on your head on top of the hammers may help.

7. The 64-note model has an automatic reroll unit which may be in your way. If it is, you will need to remove it. The entire top assembly (the shelf and all components mounted thereon) may now be lifted a tiny bit and eased forward. Removal of the piano action is now the same (almost) as in any other piano. Should you find it necessary to remove the piano action, it would seem advisable to do everything you can in the way of maintenance to the action because it will probably not be taken out very often. If you need to gain access to the keys you will need to know the following:

a. Just in front of the capstan screws, you will find a rail which runs from one end of the keyboard to the other. The rail has cloth on the bottom of it and is held in place by four long bolts and nuts. The function of this rail is to serve as an upstop for the player.

b. Remove the nuts and washers and them lift up on the rail. It will slide upward.

c. To remove any keys you must now lift the shelf assembly, while at the same time removing the key(s) which you need to. (At this point it would be of great help to have a spare set of hands which could be plugged in and turned on.)

I have also received a letter from Mike Cady in Red Wing, Minnesota. He is asking a question about the size of the pouch cavity and the pouch which is glued thereto.

In my experience it has never been necessary to change the size of the pouch cavity. I have only changed the pouch size when someone has been there ahead of me and installed something incorrectly.

Please bear in mind that the cavity and the size of the pouch itself have been engineered very carefully. The dimensions are critical with respect to the valve which it serves. When the leather pouch is installed, it should be larger than the cavity so that you leave about 3/32" all the way around to have sufficient surface to glue.

As soon as the glue has dried you can pouch the leather. There is adequate stretch in the leather to allow for this, and it is best done with your finger.

When you have completed pouching your pouches, the next step is to seal them. To do this we use rubber cement which has been thinned about 40 per cent. The cement is applied on the pouch by means of a tube attached to the nipple under the pouch with the other end in your mouth.

If you make a tiny vacuum pump out of your mouth, you will not inhale any fumes. This draws the thinned rubber cement into the pores of the leather making it absolutely air tight.

As soon as the cement has dried, you can install the little fiber discs. The last thing you should do to your new set of pouches is dust them with talcum powder so they are not sticky.

I am told there is another method of sealing pouches using a silicone material. I have not yet tried it so I can't speak to it intelligently. If someone using this method would send me some information, I would be glad to try it so that we could all share.

In our next get-together, I will feature more of your ideas, suggestions, and information.

Calculating Technician

Part XVI

Dave Roberts

Season's greetings! Last month, I described a general approach for efficient piano scale evaluation/modification and promised I would give you program listings for the TI-59 and HP-67 programmable calculators in order to carry out this approach.

Let's also include the HP-41C (recently $260). It is currently the most powerful hand-held calculator available and is the only one with a liquid crystal display, so the batteries will last a very long time and there is no cord to plug in. Also, it has 'continuous-memory', which means you don't need the extra cost magnetic card reader if you use it exclusively for piano scale work.

The TI-59 and HP-67 have built-in card readers and recently were priced at $220 and $300, respectively. As I said in the *Journal* January 1980 article, I personally prefer HP products because of their extraordinary reliability, durability, efficiency and ease of use.

For those of you who are still intimidated by the thought of doing all the calculations summarized in last month's article, let me assure you that all you have to be able to do is find a button on the calculator keyboard if I tell you the row/column location. With a programmable calculator, no math background is required as long as someone gives you the program listing.

In a nutshell, this is all you typically would have to do to evaluate a scale:

- convince Santa to get you a TI-59, HP-67 or HP-41C,
- plug it in (if TI-59 or HP-67) and turn it on,
- push a sequence of buttons which I will give you (one time only!),
- key-in certain numerical information, as on a typewriter keyboard (string length, diameter, etc.) for a unison of interest,
- press an appropriate button in the top row of buttons on the calculator keyboard, which I will describe to you,
- wait about 10 seconds while the calculator calculates all those formulas given last month,
- write down on your worksheet the calculated values of inharmonicity, loudness, tension, etc., in the order that they automatically appear in the calculator display, and
- go on to the next unison.

All this should take less than 1 hour (plus the one time only keying-in of the program, step #3 above), even if you evaluate the entire stringing scale. If the inharmonicity (I_4), loudness ($\mathbb{Z}$) and hammer/string contact time factor (**NT/H**) all appear to change smoothly from unison to unison on your worksheet, even across all scale breaks, then you can feel reasonably comfortable about rebuilding your piano using its original stringing scale.

If there are some rough spots, all you have to do is repeat the calculations for those particular unisons using different values of wire diameters **d** and/or d_w and possibly different **a**, **b**, **N** or **A** values (see definitions in last month's article). With a little practice, you'll quickly zero in on optimum values for smoothing rough spots in the scale. Either that or you'll find you really can't make these spots any better than they already are.

Remember your order of priorities as described in previous articles.

For those of you who would dare to do more than just smooth the scale (i.e., lower average inharmonicity in the bass or increase average loudness), I don't advise it unless you've practiced this sort of thing on willing subjects or your own pianos. Yes, I do some of this myself, but let me caution you to be very careful in this regard.

For instance, if your modification causes average tension to change significantly in more than just a few unisons, are you sure you know what impact this will have on downbearing and soundboard motion? You must keep in mind that the formulas which I have given you, as complex as they may appear, are in reality rather simplistic compared to the enormous acoustical complexity of the piano itself.

Even so, I believe the approach I have outlined in these articles is a major improvement in scale eval-

TABLE I. HP-67 PROGRAM LISTING

Step	Keycode	Step	Keycode	Step	Keycode
001	31 25 11	076	31 25 03	151	35 34
002	33 06	077	23 01	152	01
003	35 53	078	35 72	153	51
004	33 07	079	31 25 05	154	08
005	35 53	080	34 00	155	33 71 03
006	31 25 01	081	34 14	156	81
007	33 12	082	81	157	01
008	35 53	083	32 54	158	61
009	33 11	084	01	159	71
010	44	085	51	160	34 11
011	35 22	086	34 06	161	31 22 04
012	31 25 02	087	71	162	34 12
013	33 13	088	01	163	31 22 04
014	33 00	089	61	164	61
015	35 53	090	35 33	165	35 34
016	33 14	091	34 15	166	81
017	35 53	092	34 14	167	35 34
018	33 15	093	71	168	01
019	35 53	094	08	169	51
020	33 08	095	00	170	71
021	35 53	096	02	171	03
022	35 22	097	83	172	71
023	31 25 04	098	06	173	61
024	34 15	099	81	174	02
025	81	100	32 54	175	06
026	34 05	101	71	176	43
027	31 54	102	02	177	03
028	51	103	34 08	178	71
029	35 64	104	06	179	35 61 03
030	03	105	81	180	23 01
031	35 63	106	35 63	181	35 72
032	35 22	107	71	182	34 01
033	31 25 06	108	33 02	183	23 00
034	34 09	109	33 04	184	31 84
035	01	110	33 09	185	34 02
036	61	111	34 07	186	23 02
037	81	112	71	187	84
038	23 00	113	33 03	188	34 03
039	01	114	35 34	189	23 00
040	06	115	71	190	35 72
041	71	116	34 14	191	34 04
042	31 24	117	32 54	192	35 22
043	01	118	33 81 09	193	31 25 12
044	06	119	71	194	31 22 02
045	81	120	31 54	195	35 52
046	31 83	121	33 01	196	51
047	35 72	122	34 14	197	01
048	35 82	123	05	198	83
049	32 83	124	41	199	09
050	01	125	03	200	81
051	06	126	81	201	33 13
052	71	127	35 63	202	22 03
053	31 84	128	83	203	31 25 14
054	35 22	129	09	204	35 61 03
055	32 25 11	130	03	205	34 12
056	34 13	131	71	206	61
057	32 25 13	132	33 81 02	207	31 22 06
058	34 08	133	02	208	34 15
059	34 15	134	03	209	34 12
060	35 53	135	33 81 09	210	51
061	35 53	136	34 14	211	34 11
062	22 13	137	32 54	212	51
063	32 25 12	138	32 54	213	22 06
064	34 08	139	34 15	214	32 25 14
065	34 15	140	33 81 03	215	31 22 01
066	34 14	141	32 54	216	22 05
067	35 54	142	81	217	31 25 15
068	31 25 13	143	34 04	218	34 15
069	31 22 02	144	81	219	35 71 03
070	01	145	03	220	35 52
071	83	146	07	221	34 09
072	09	147	03	222	71
073	71	148	32 54	223	23 02
074	61	149	81	224	35 22
075	33 00	150	33 05		

uation/modification over anything previously published or presented to our membership.

Let me now elaborate on the process of using the calculator. I will start with the HP-67 because I find it the easiest to explain. After you've plugged it in, flip the OFF/ON switch to ON and the PRGM/RUN switch to PRGM. The LED display will now show 000.

To key the program into the calculator, you simply follow the sequence of 2-digit keycodes (row/column) listed in Table I. Each step may contain 1, 2 or 3 keystrokes. For instance, to key-in the 1st program step, you need to press 3 keys: row 3/column 1; row 2/column 5; row 1/column 1. After you press that 3rd key, the display will suddenly change to 001 31 25 11, indicating that you have completed the 1st program step (001) correctly.

Proceed in like fashion until all 224 steps are completed. You'll be happy to know that you'll never have to do this again, because the program you've just keyed into the calculator can be stored permanently on a small magnetic card included with your calculator. Should you want to do scale work again a week from now, the calculator can 'read' that little card in a few seconds.

Incidentally, there is one exception to the simple keycode designation described above. If a code starts with zero (i.e., 01, 02, etc.) then just press the key having the 2nd code digit printed on it. For instance, program step 002 has the keycodes 33 06. Therefore, you would press the key in row 3/column 3 followed by the key with the 6 printed on it, whereupon the display will change to 002 33 06.

After completing step 224, flip the PRGM/RUN switch to RUN and you're ready to evaluate/modify a scale. You have 9 calculation 'routines' at your disposal for this purpose, labelled *A, B, C, D, E, a, b, c,* and *d.*

To do a particular routine, just key-in the data required, as summarized in Table II, and press the keyboard button having the appropriate label printed on it. The lower case routines (*a, b, c or d*) are executed by first pressing the yellow key (row 3/column 1) on the keyboard and then pressing the corresponding upper case key (*A, B, C, D,* and *E* are all in row 1).

To key-in the required data properly, notice that I have separated successive numbers with a vertical arrow (↑) in Table II. This just indicates that you press the 1st key in the 4th row (called the ENTER key) between numerical entries, just as you would use the "space" or "comma" key on a typewriter to separate a series of numbers. If only one number is to be keyed in, as in routine *D*, then there is no need to push the ENTER key.

Regardless of whether you are going to do an evaluation or a modification, you must first do the *A* routine so the calculator will know the values (or proposed values) of **a, b, N** and **A** in the section of the scale in which you are interested. Even if you are working in the plain wire section, where **a, b** and **A** have no physical significance, you still have to go through the motions of keying-in **a ↑ b ↑ N ↑ A**, in that order, so why not just make it **O ↑ O ↑ N ↑ O**? The only times you will have to use this routine again is just before you start working on a section of the scale where one or more of the quantities **a, b, N** or **A** is changed (not very often).

Incidentally, when evaluating a scale, don't bother changing **a** and **b** for each unison if they only vary by, say, plus or minus ⅛" from unison to unison.

Routine *B* is the principle scale evaluation/modification routine. If you are in the plain wire section, just input **m ↑ L ↑ d ↑ d** or **m ↑ L ↑ d ↑** (either way works) before pressing the *B* key. After a few seconds, the calculator will display $\mathbf{d_w}$, $\mathbf{l_4}$, **Z** and $\mathbf{T/T_B}$, in that order, giving you just enough time to write these values down on your worksheet (see last month's article). If you are also interested in **NT/H** and **T**, just press the key in the lower, right-hand corner (row 8/column 4) after $\mathbf{T/T_B}$ appears in the display.

Routine *C* is the wound-string scale modification routine. If your initial guess at modified values for **d** and $\mathbf{d_w}$ don't give you the smoothing you had hoped for, you can use routines *a, b, c* and *d* to make further guesses. If all else fails, you may want to propose a major change, say in **N** and/or **A**, in which case you'll first have to run the *A* routine again.

The *D* routine would only be run after you are sure of your new scale and *must* be preceded by routine *B, C, a, b, c* or *d.* The display will flash the integer part of $\mathbf{L_1}$ for 1 second, then the number of 16ths for 5 seconds, then repeat this for $\mathbf{L_2}$. This is done so you can express the fractional part of $\mathbf{L_1}$ and $\mathbf{L_2}$ in 16ths of an inch, which most (U.S.) stringmakers prefer.

Routine *E* may not be used much, but it's there if you want it. For optimum tuning stability, elongation should change smoothly from unison to unison. The only way this can happen at the plain/wound break, and still maintain smooth $\mathbf{l_4}$, **Z** and **NT/H**, is to have the 1st wound unison at least 20 per cent shorter than the adjacent plain unison. This is only possible on the larger pianos, unless a separate (tenor) bridge is used for wound treble strings.

Next month, I hope to give comparable program listings for the TI-59 and HP-41C, so stay tuned to this column .... □

TABLE II. HP-67 CALCULATION ROUTINES

Routine	Input	Description
A	A ↑ b ↑ N ↑ A	Stores *a, b, N and A into* internal memory for later use. Displays zero when finished.
B	m ↑ L ↑ d ↑ D	Calculates and displays d_w, l_4, Z and T/T_B; also NT/H and T if desired.
C	m ↑ L ↑ d ↑ d_w	D, l_4, Z and T/T_B; also NT/H and T if desired.
D	M	Calculates and displays L_1 and L_2.
E	no entry G	Calc. & display E_L. Calc. & display E_G.
a	d	Repeats routine *C* changing only d
b	d_w	Repeats routine *C* changing only d_w.
c	d ↑ d_w	Repeats routine *C* changing only d & d_w
d	a ↑ b	Repeats routine *C* changing only a & b
e	—	no routine for this label.

After Touch

David W. Pitsch

50-Point Guide To Grand Regulation Part V

Section III. Alignments

27) Align hammers to strings

To facilitate this alignment procedure, install the action into the piano and make a rough check of the let-off measurement. If the let-off is very far from the strings, the hammer-to-string alignment will be very hard to make. So try adjusting the let-off by say one-half or one complete turn of the adjusting screw and see what number of turns it takes to get the hammer to let-off right next to the string.

At this point in the regulation procedure, if the hammer blocks on the string, it will be all the easier to make the alignment. Then remove the action and turn all of the let-off screws the number of turns that you found necessary to get the hammer closer to the strings.

Before starting to center the hammer to the strings, make sure that the hammers have been filed, removing all traces of former string grooves. If the piano has agraffes, then your job will only be to align the hammers to the strings. If the piano does not have string aligning mechanisms throughout, then you *must* make sure that the strings are properly spaced and centered *before* attempting to align any hammers.

Normally, unless the plate has been repositioned or a bridge reglued onto the soundboard, there should be a straight line running from the hitch pin through the bridge pins and on to the tuning pin hole in the plate. The middle string of a trichord should run along this line, with the right and left strings having the same inward pointing angle, since the bridge pins are wider spaced than the spacing at the V bar.

Begin aligning the hammers to the strings by taking a wire hook and coming down from the strings, lifting the shank so that the hammer blocks on the string. Or, take a finger and lift the bottom of the whippen taking the hammer past let-off and pushing up until the hammer again blocks on the string. I prefer the latter method since the wire hook is slower and can cause the hammer to be pulled to one side if you are not careful.

Looking directly above the hammer, check to see if it is properly centered to the strings. For a trichord, equal amounts of hammer should be seen on both sides of the unison. On single or double unisons, the hammer can either be likewise centered, or they can favor the bass side a little, depending upon how you want the hammer to strike when using the una corda pedal.

Any hammers which are properly centered on the strings I mark with an "O" on the key with a piece of chalk. Those which are off to one side I mark with a straight line on the key to the side which they need to go, varying the thickness of the chalk mark as the amount the hammer needs to be moved. Do one section at a time.

Pull the action out after chalking all of the keys, and compare the marks with the way the hammers look. All of the chalk marks must coincide with either a perfectly centered hammer or else a hammer that needs to be traveled, angled, spaced, or a combination of these three.

Place a long screwdriver blade or other object such as a spare pedal rod under all of the shanks in this section and check the hammers first for traveling. Even though a key was marked "O," the hammer may be traveling or have the incorrect angle. After correcting the traveling, heat the shanks of those traveled along with any others whose angle needs to be changed until all of the hammer angles look uniform. Lastly, space the hammer by slightly moving the flange sideways.

If the flanges are of the type where a screwdriver or flange spacer can be used, install the action into the piano and space the flanges directly by lifting up the hammer until it blocks on the string. If the flanges are not of this type, then they must be spaced outside of the piano. Use the width of the chalk marks as a guide to how far to move the flange, and try to use any keys marked with the "O" as a point of departure.

I get two keys about five or six keys apart marked with the "O" and work from these, putting the action back into the piano and making any needed refinements.

Remember that some manufacturers have a two degree tilt of the hammer on the shank. The more the hammer was bored at an angle to match the angle of the strings, the more likely it is the hammers will have to be tilted on the shank to properly space the hammer to the string and to make sure the tails do not interfere with the adjacent hammers.

Center all of the hammers in each section in the manner shown. If someone altered the plate sideways, for instance when installing a new pinblock, or if a soundboard was replaced and the bridges are a little off to one side, good luck!

28) Align and square whippens to the knuckle

Ideally, when the shank and flange assembly is made, the bottom of the flange should be perfectly flat and the birds-eye be drilled correctly so that the center pin is perfectly horizontal. The shank bushings should be perfectly fitted so that the center pin bisects the shank, and of course, the knuckle should be ungrooved and perfectly round, being glued onto the shank squarely. Such an assembly would have no need to be traveled, making the knuckle tilt to one side. Sweet dreams.

What happens when a tilted knuckle receives a strong blow from the jack? If the jack is also at the same tilt, very little power is lost, and rather little wear results. But when the jack is not on the same plane as the knuckle, power is lost and abnormal wear results. Every time the jack hits the knuckle, the power from the key is transmitted by the tip of the jack to the knuckle, not by the whole top surface of the jack. Power is lost here. Worse yet, the jack center pin and bushing take a beating. Likewise, the knuckles wear at one spot since the corner of the jack inflicts the blow. The shank then is given a twisting motion at the center pin instead of an even straight blow, again resulting in a loss of power and abnormal wear to the shank bushing. The best relationship is when the whippen and thereby the jack is tilted to match the tilt of the knuckle.

Granted, tilting the whippen results in the capstan no longer hitting the whippen felt squarely, and the whippen center pin and bushing get a little twisting motion. But remember the capstan is rounded, so the whippen felt is not abnormally worn. Also keep in mind that the arc of travel for the whippen is far less than the shank, and the whippen center pin is further from the transmission of power than the hammershank center. The lesser of evils is definitely to tilt the whippen.

Therefore, when spacing the balanciers to the knuckle, look at two things:

1) Does the tilt of the whippen need to be changed to match the tilt of the jack?

2) Should the whippen be moved sideways to keep the capstan centered under the whippen felt?

If tilting the whippen aligns both the knuckle to the balancier and the whippen felt to the capstan, all is well. But, if tilting the whippen puts the knuckle in line at the balancier and not the capstan at the whippen felt, then compromise. The balancier must always be centered with the knuckle, even if the tilt of the jack does not exactly match that of the knuckle. The capstan can be a little off to the center of the whippen, but not so much as to cause the capstan to be on the edge of the whippen felt.

To tilt the whippen, loosen the flange screw and tilt, then retighten the screw. Sometimes the flange must be papered underneath on one side. To space the whippen sideways, remove the flange and paper the flange on the side that you wish the whippen to move. This is the opposite to papering a hammershank flange. For ease in removing the whippen flanges, it is best to remove the hammer rest rail first, if there is one.

VON DER WERKSTATT

Priscilla and Joel Rappaport

LEARNING BY DOING

For the past few months we have shared with you some of our experiences at the European Piano Builders Convention held near Hamburg, Germany, last May. In describing the different organizations that took part in that event we compared their makeup to our own Piano Technicians Guild. But there is a big difference between what the Europeans call a piano builder and our designation of piano technician.

One of the most notable endeavors carried out by the piano builders organizations is the training of their apprentices.

In Europe, a young person learns piano building (*Klavierbau*) by accepting a three-and-one-half-year apprentice position either in a repair shop or in a factory.

At both places the apprentice (*Auszubildende*) learns repair and the building of new pianos, although the emphasis may be on one aspect or the other.

A master piano builder (*Klavierbaumeister*), in addition to running the business, is responsible for the training and the progress of the apprentice. The apprentice in turn is expected to be at work on time, work hard learning the trade, abide by the rules of the shop, and attend the trade school eight weeks out of the year.

During the learning period an apprentice receives a small amount of money each month. It is more like pocket money than a salary, as it is not enough to live on.

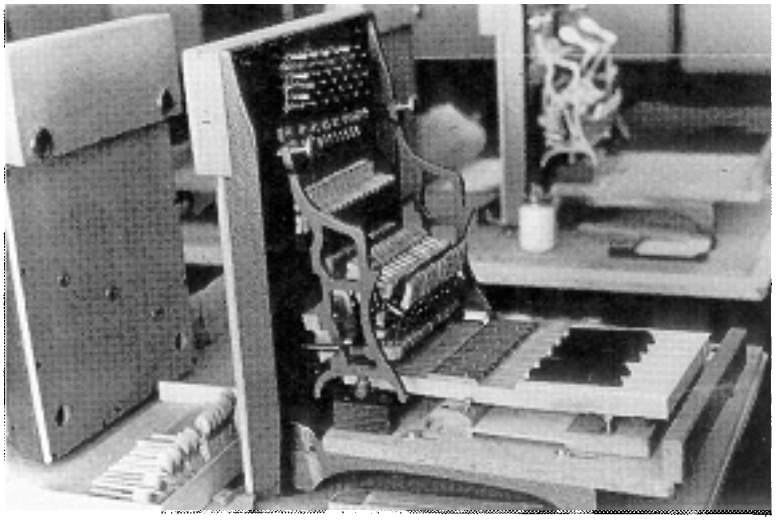
At the end of the three and a half years of learning, the apprentice takes exams (*Gesellenprufung*) in tuning and piano building. After passing these exams, the person is no longer an apprentice, but now a journeyman, or *Geselle*, and entitled to be employed in a factory or shop at a normal salary.

Many former apprentices remain with the company they learned with, expanding their experience by working in the production. Young technicians who prefer to tune and make service calls often find work in large retail stores with a shop where a master piano builder is in charge.

One of the main differences between a journeyman in Germany and piano technician in the U.S., is that a journeyman even with three and a half years of training is not allowed to run a business nor teach apprentices. Only a master piano builder (*Klavierbaumeister*) has that privilege. A journeyman or *Geselle* must then be employed by someone else.

It is also interesting to note, that in Germany there are no apprentice-piano technicians. For a young person to get a start in this profession, an apprenticeship in *Klavierbau* is the route. Then, after this training period, one can go into different directions, specializing in tuning and service, repair, or new piano building such as working in a factory. The basic training background needed for all these areas is the same.

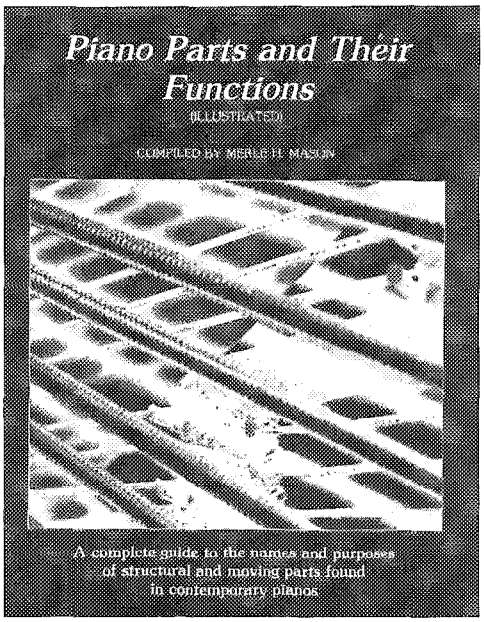
A Master Piano Builder (*Klavierbaumeister*), then, is one who after at least five years of working in the profession, goes back to school and passes all exams leading to the Master Piano Building Diploma (*Meisterbrief*). To do this, exams in business administration, teaching methods, piano construction and design and practical piano building – including building an in-



Action model designed by Georg Neureiter, Euterpe Factory, Langlau, Germany. This model has already had dampers installed by members of the class. The keyboard was roughly put in place to show the complete model.

ANNOUNCING A NEW EDITION. . . .

PIANO PARTS AND THEIR FUNCTIONS (ILLUSTRATED)



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PIANO PARTS AND THEIR FUNCTIONS, The Piano Technicians Guild, Seattle, 1981

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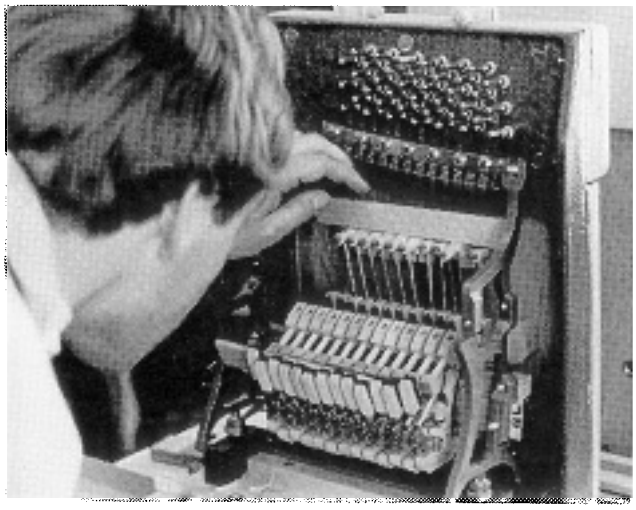
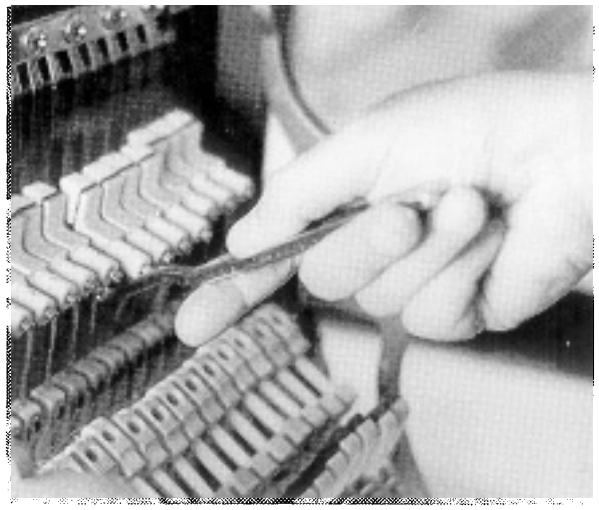
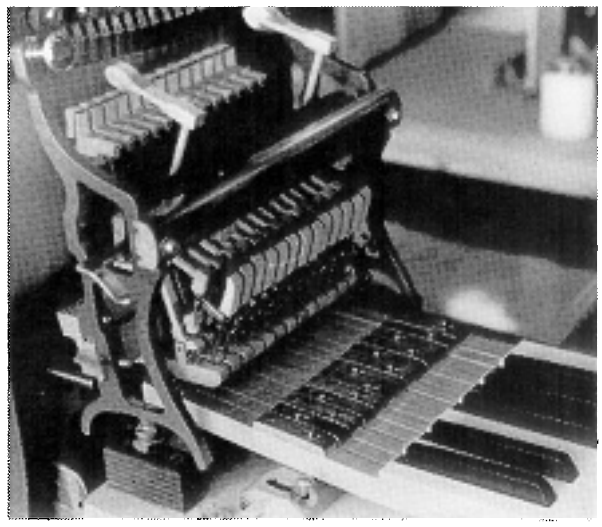


Adjusting height of damper heads with straight edge.



Bending damper wires near damper head.

Adjusting dampers by adjusting the top and bottom of damper so that it sits squarely on strings. Spaces between dampers are even and parallel.



Hammer guides are set and ready to be installed. Note: The keyboard is not installed during this operation, but happens to be shown in this photo.

strument — must be passed satisfactorily.

We have received many calls from technicians around the country asking how they can go to this school in Ludwigsburg, Germany, to become a master piano builder in six months. We would like to clarify a few general points concerning the school.

The course, given every two years for piano builders (*Klavierbauer*) is for people who have already gone through an apprenticeship and have been working in the profession as piano builders for at least five years. The school doesn't make you a piano builder, the craftsmanship must be there first. The attendance at this school mainly prepares you to run your own business and instructs you in methods of teaching in preparation for taking on apprentices.

There are also courses in piano building and construction which are designed to supplement your knowledge and experience as a piano builder. Such courses are needed since they prepare you for part of the Masters exam — the designing and building of an instrument on your own. Minimum standards of competency must be met in *all* areas of piano building, not just the ability to do one thing, before a Masters Diploma in Piano Building (*Meisterbrief im Klavierbau*) is awarded.

A first-year apprentice in a factory usually will be started out in the mill where they join other workers handling lumber, cutting it for drying or for the various needs in the production. They may spend up to six months becoming familiar with wood and machines.

The rest of their training time is divided up among the various departments in the factory. By the time an apprentice gets to do regulation, which is usually in their third year, they are already quite familiar with most aspects of piano building.

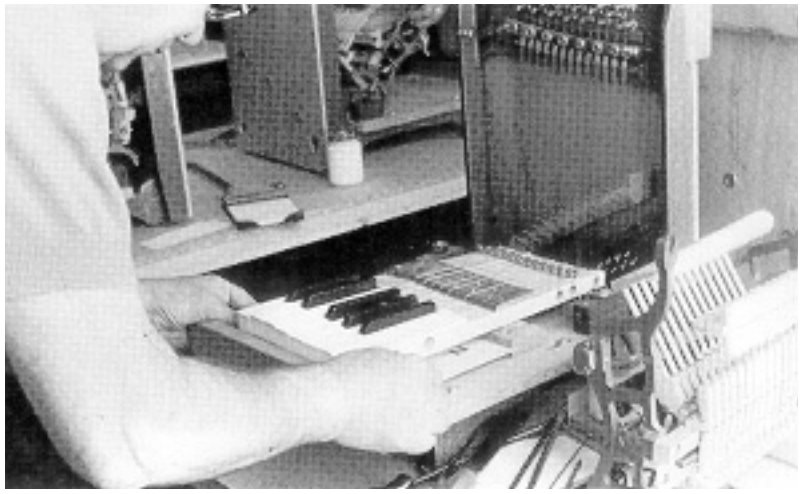
The curriculum for piano builders includes areas of general knowl-

edge and special skills to be acquired for piano building. General knowledge includes basic reading of technical drawings, care of wood, use of machines, saws and planers, making different joints with wood, veneer work, sanding and preparation of wood for refinishing, care of tools and safety rules.

Special skills and knowledge pertaining particularly to pianos include: gluing pinblocks together, making the soundboard, rib and bridge construction, soundboard installation, bridge notching and pinning, bass string spinning, drilling pinblocks, stringing, chipping, action work to include installing dampers and gluing hammers, regulation, pedal and trapwork installation, fine regulation, tuning, voicing, elementary piano playing, action functions in terms of lever relationships, tone production, basic acoustics and scale design and history of piano making.

During this learning period, the apprentice is required to keep a detailed notebook of hours worked, what was done and methods and procedures used. Each week the *Meister* checks this over, signs it and perhaps makes comments or suggestions which are helpful to the apprentice.

One of the convention classes dealt with putting together an upright action. This was much more than a regulation class. Master Piano Builder Paul Stockle took the classes through all the steps used to build an upright action into the piano. This included preparing and placing the action into the correct position, damper installation, hammer gluing and regulation.



Installation of keyboard. Keyboard is positioned in and out, left and right. The capstans should be in the correct position under the saddle felt of the whippen and centered left and right under the whippen.

Klavierbaumeister Paul Stockle explains the procedure for rolling hammer shanks in preparation for gluing.

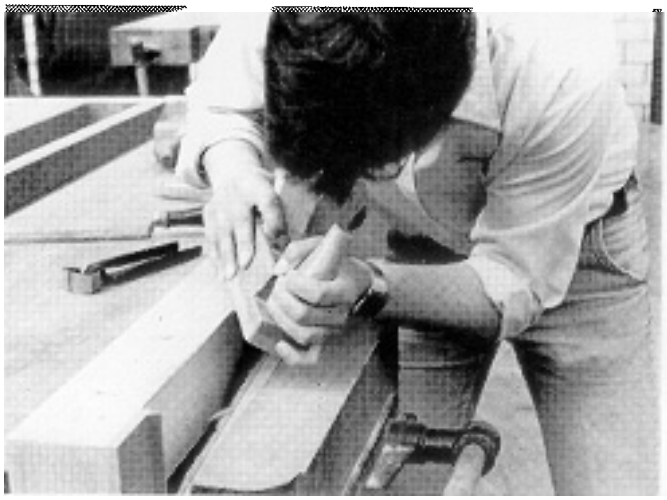
These action models upon which we worked were designed by Master Piano Builder Georg Neureiter who is director of design, production and apprenctice training at the Euterpe factory. This ingenious model encompassing an octave was just like a section of an upright.

Neureiter designed a portion of the cast-iron plate and had it cast specifically for this purpose. Given drawings and raw materials, the apprentices at Euterpe built these models. They were constructed, strung up with plain wire and then fitted with their actions. The procedure is exactly that used on the production line and provides an excellent introduction to this work before the apprentice must hold his or her own on the actual production line.

Running an apprentice program costs money. Apprentices must have a suitable work place, they need supervision and instruction which take time. The work they do is done at a much slower pace than that of a regular worker, so their productivity barely offsets the costs involved. They are also out of the factory eight weeks during the year to attend the trade school for apprentices.

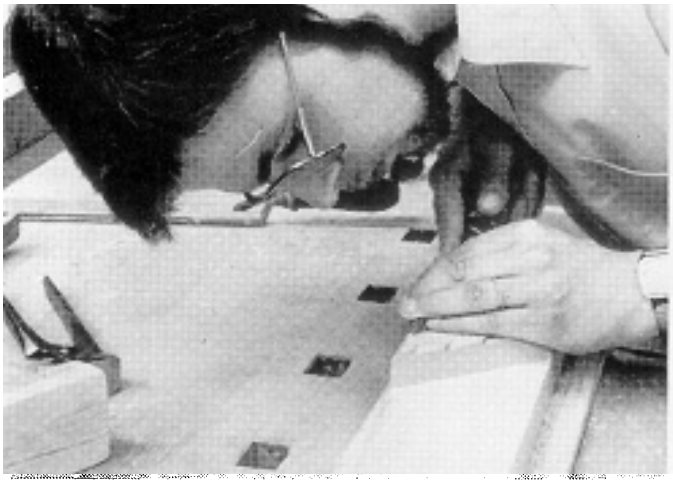
Why then do German factories involve themselves with an apprentice program? One could say a good apprentice program is the best way to insure a supply of good, well trained piano builders to keep building quality pianos in the future. Only with craftsmen who understand their work and who are interested in quality, can quality instruments be built.

Although the apprentice concept here in the U.S. is quite different from that in Germany, the oppor-



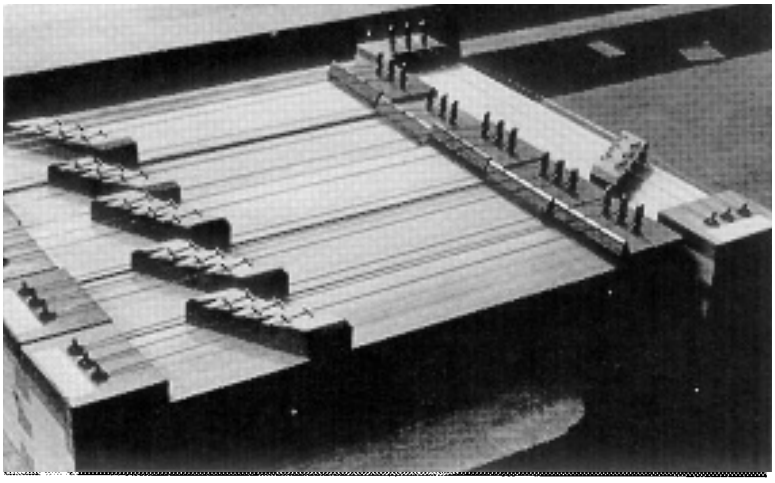
An apprentice at the trade school puts the finishing touches on a practical project, the building of a monochord.

Drilling the pinblock for this monochord. One apprentice helps the other by making sure the angle used to drill the tuning pins is correct.



Bridge notching. Using a sharp chisel, an apprentice finishes the end of the bridge on his monochord.

Klavierbaumeister Hartmut Burgman, instructor at the school in Ludwigsburg, discusses the basics of tuning pin angle and coils with a student. The apprentice is graded on this project.



Several finished monochords made by the apprentices for their school exam.

tunities to learn good piano work are many. The emphasis here, however, is a little more centered on piano technology than on piano building.

There are trade schools in various parts of the country offering comprehensive one to two-year programs in piano technology.

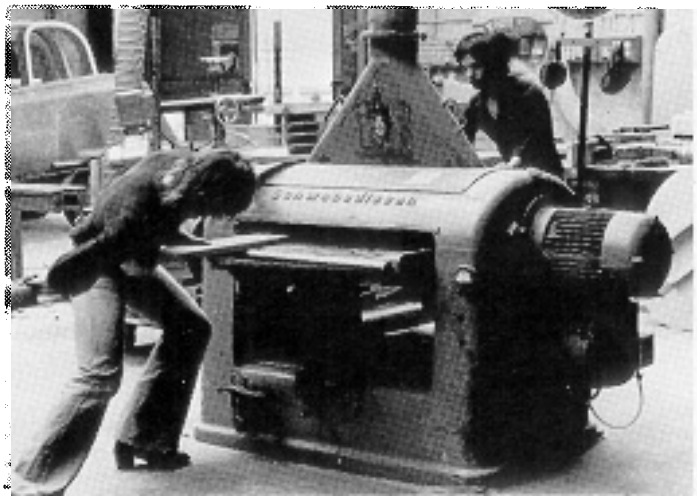
The Piano Technicians Guild Regional Seminars and National Conventions offer and provide workshops and classes on practically every aspect of piano work. Opportunities to meet people and exchange ideas and information at these seminars are unlimited.

And there are also some colleges offering degree programs in piano technology.

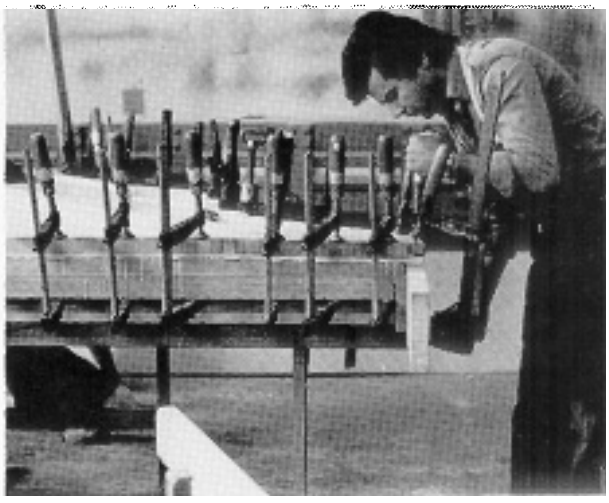
Of course, nobody learns everything from a school or even a German apprentice program. Often these learning opportunities act as a good introduction and provide a good background to the profession. Much of what a person accomplishes is done simply on his or her own through years of hard work.

If you want to become a piano builder, then build a piano. Get a large drawing board, draw a hammer line on it and design a piano. Build it and decide what you like and don't like. Then try again to make it better. A master piano builder is one who has all areas of piano building within his or her experience. Just being able to do one phase or another of the rebuilding process is not enough. A true master at piano building can construct his piano at the drawing board, then in the shop, build the instrument, transforming the ideas and concepts on paper into reality.

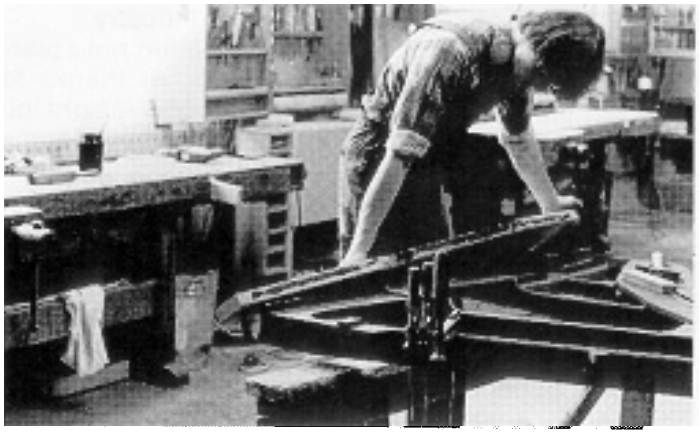
The pictures accompanying this article show people "learning by doing."



Apprentices working in the machine room preparing lumber for the production.



Gluing in soundboard on a grand piano at the Ibach Pianoforte-fabrik, Schwelm, Germany.

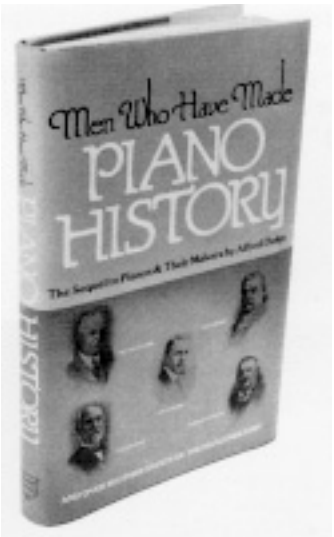


Fitting pinblock to flange of plate. Here an apprentice at the Ibach factory checks the final fit of the block.

After the convention we visited Musikhaus Fischer in Schorndorf, Germany. Paul Stockle (middle) is the Klavierbaumeister in charge of outside service, repair shop and education of apprentices. Here, a project assigned to an apprentice — fitting a new pinblock into an upright piano — is being discussed.

DOLGE

Two Reviews



Men Who Have Made Piano History
By Alfred Dolge
Vestal Press, Vestal, N.Y.
$15

A Review
by Charles P. Huether

This book, originally published as *Pianos and Their Makers Vol. II*, has recently been reprinted by Vestal Press. They have called it a sequel to *Pianos and Their Makers*, which it is. It is an extension of the earlier work with which most of us are familiar.

Since the historical development of the piano is covered in the first volume, this one sticks to manufacturing development and biography, much as the second half of the original work did. It is a worthwhile addition and rounds out the first book.

Vestal Press has done a wonderful job of cross referencing and indexing the book, making it a very simple-to-use tool when looking for background information. Since so much of your work concerns older, no-longer-in-production instruments, a book like this together with the first volume can go a long way in helping us understand these pianos.

This book is a worthwhile and important addition to the library of anyone in the piano business, especially to those who service instruments and are confronted with the task of appraising or evaluating old pianos. This is the sort of material that can help you decide the value of restoring older instruments. It can be a valuable tool in your business. □

Dolge, by Eleanor W. Franz. Herkimer County Historical Soc. Press, Herkimer, N.Y. $9.50.

A Review
by Charles P. Huether

You cannot be long in the piano or piano service business before you become aware of Alfred Dolge. His book "Pianos and Their Makers," published in 1911 and reprinted in 1972, has long been a handy reference and historical guide.

The recent reprinting of "Volume II" of the above under the title "Men Who Have Made Piano History," with helpful cross referencing and indexing, by Vestal Press only adds to the interest and wonder about the author. At last we have something which fills in some of the blank spaces.

Alfred Dolge was born in Germany. His impact on the piano industry was world-wide, but the personal drama of his life and the realization and/or failure of his dreams of industrial reform were lived out in the boundaries of the small town of Dolgeville, New York, where he concentrated his multifaceted manufacturing operations.

Eleanor W. Franz, a local historian, has long been interested in this man and his dreams of the social responsibility of industrialists. From her years of personal association with people who knew or who were only a generation away from Alfred Dolge, plus access to local documents and material, she has fashioned a fascinating story of the impact of an innovative and idealistic man on a remote community in the midst of the tremendous industrial development in the latter half of the 19th century. It is a revealing biography of a complex and important man.

For those of us who have read, or will read, the two volumes by Dolge on pianos and their makers, and all of us should have these books in our library, this wonderful little biography will give us some insight into the man who wrote so authoritatively and comprehensively about our industry.

Franz is an historian, not a piano person. We owe her thanks for helping us gain some insight into the person and character of someone who has been so important to our business.

For historian or piano-person, and many of us are both, this book is a worthwhile addition to our library. It will help to show the importance and impact of this industry on our country in a particulary dramatic and exciting period, a period which was, coincidentally or because of people like Dolge, the greatest in the development of the modern piano, its manufacture and its merchandizing.

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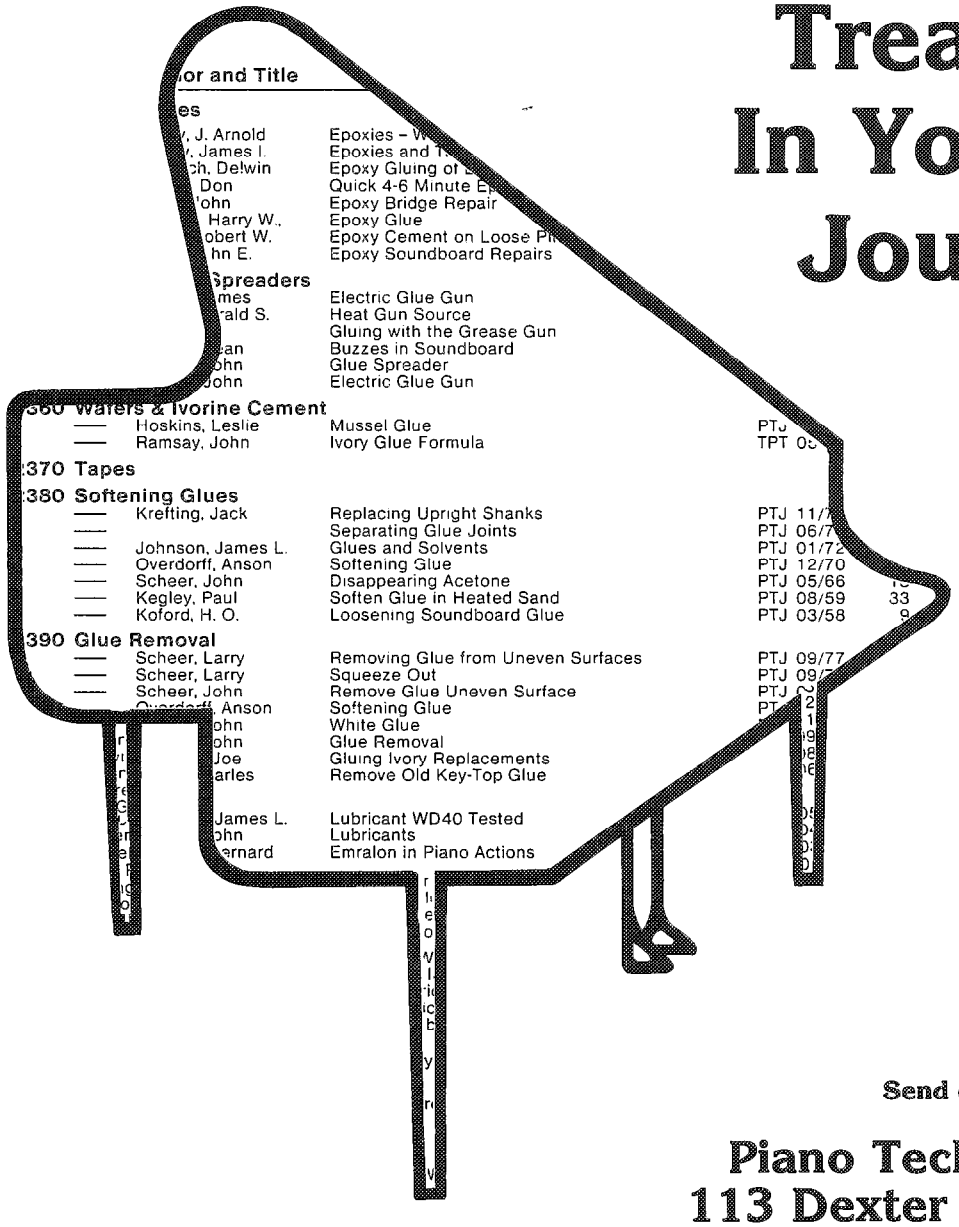

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All New for 1980-1981

This year the booster club has a new format.

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

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

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

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

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

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

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

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

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

	Pts	Mbs
President's Club		
DRAINE, Robert	24	8
Restorer's Club		
COLEMAN, Sr., Jim		
DUNCAN, David		
FANNING, William		
GOLD, Jimmy		
MENSCHING, Dale		
WALKUP, Ken		
WEEKS, George		
Booster Club		
AFFLECK, Don	1	1
ALLEN, Jon	1	1
ANDERSON, Albert	6	2
ASHMORE, Yvonne	1	1
BAIRD, John	2	2
BITTINGER, Dick	10	4
BROOKSHIRE, Jerry	1	1
BROWNFIELD, Gary	3	1
CALLAHAN, James	1	1
CLEVENGER, Wayne	4	2
COLEMAN, Sr., Jim	4	2
COX, Merril	3	1
CRABB, Larry	2	2
CUNNINGHAM, Jess	3	1
DeARMOND, C. E.	6	2
DeTAR, Brian	1	1
DRAINE, Robert	24	8
DROST, Michael	6	2
DUNCAN, David	3	1
ERDMAN, James	1	1
EVANS, Dan	3	1
FANNING, William	6	2
FELTON, Hilbert	4	2
FINGER, Chris	9	3
FLEGLE, Sr., Richard	1	1
FROST, Jack	6	2
GARLICK, William	3	1
GARRETT, Joseph	1	1
GENTRY, Kenneth	3	1
GILLER, Evan	4	2
GOLD, Jimmy	3	1
GULLIXSON, Elisha	3	1
HANSON, Frank	9	3
HARMON, Clayton	3	1
HAUCK, Jack	1	1
HEDRICK, Ralph	4	2
HERBERT, Curtis	2	2
KIMBELL, Michael	1	1
KINGSBURY, Richard	3	1
LYNN, Frederick	6	2
McGUIRE, Michael	3	1
McKINNON, Karl	1	1
MENSCHING, Dale	6	2
METZ, Al	2	2
ODENHEIMER, Fred	6	2
OSBORNE, James	6	2
PETERSON, Gerald	3	1
PREUITT, Ernest	4	2
RADD, Dorothy	3	1
REITER, Michael	1	1
REQUE, Styrke	1	1
RUSSELL, Bob	5	5
SAAH, Joseph	3	1
SCHOPPERT, Robert	9	3
SEITZ, Al	3	1
SIEROTA, Walter	3	1
SKOLNIK, David	3	1

STEELE, Joe	10	4
SVEC, John	1	1
THILE, Scott	1	1
WAGNER, Lloyd	6	2
WALKUP, Ken	3	1
WEEKS, George	4	2
WEST, Richard	2	2
WOODALL, Dennis	3	1
ZEISEMER, Bruce	3	1
ZELLMAN, Adelaide	1	1

New Members

REGISTERED TECHNICIANS

Central North Carolina Chapter
CHANDLER, ALTON R.
Rt. 1, Box 427E
Dobbin Holmes Road
Fayetteville, NC 28301

HINSON, WILLIAM L.
327 North Tryon St.
Charlotte, NC 28202

THOMPSON, ANTHONY L.
407 Woodlawn Avenue
Greensboro, NC 27401

Chicago, IL Chapter
KUPISZEWSKI, JOSEPH M.
3318 S. East Ave.
Berwyn, IL 60402

WIEMERSLAGE, ARTHUR H.
7N 073 Briargate Terrace
Medinah, IL 60157

Minnesota-North Iowa Chapter
PECK, GAIL C.
Route 1
Star Prairie, WI 54026

Montreal, Canada Chapter
WAGNER, KERRY M.
1500 Rue Trepanier
Chomedey, Laval, PQ H7W 3G6

Newfoundland, Canada Chapter
COLLIS, ALASTAIR L.
554 Topsail Road
St. John's, NF A1C 5K4

HUTCHINGS, WILLIAM C.
32 East Valley Road
Corner Brook, NF A2H 2I3

North Central Louisiana Chapter
GREEN, BOYCE L.
6701 Jefferson Paige Rd., #392
Shreveport, LA 71119

Northeast Florida Chapter
WIDMAYER, RUSSELL A.
3468 NW 12th Ave.
Gainesville, FL 32605

Richmond, Virginia Chapter
LYNN, WILLIAM B.
P.O. Box 3
Farmville, VA 23901

WHITEHEAD, J. DALE
600 A Second St.
Farmville, VA 23901

South Dakota Chapter
CARVER, STEVE H.
112 South Euclid
Sioux Fallx, SD 57104

HAMILTON, ROGER
3710 Stone Avenue
Sioux City, Iowa 51106

ISAACSON, NEIL C.
1709 S. Duluth
Sioux Falls, SD 57105

St. Louis, Missouri Chapter
BENTLEY, RAY T.
2307 Briarcliff Drive
Alton, IL 62002

Texoma, Texas Chapter
WILKINS, JERRY G.
P.O. Box 406
Cordell, OK 73632

APPRENTICES

Dayton, Ohio Chapter
O'BRIEN, MICHAEL
1222 Nassau Drive
Miamsburg, OH 45342

Denver, Colorado Chapter
OSWALD, RALPH W.
840 35th Street
Boulder, CO 80303

QUALLS, ROBERT C.
2603 South Nome
Aurora, CO 80014

Idaho West Chapter
DAILEY, GREGORY
P.O. Box 1533
Hailey, ID 83333

Minnesota-North Iowa Chapter
ABBOTT, BRIAN W.
221 Johnson Street
River Falls, WI 54022

JOHNSON, JON
5277 H odgson Road
St. Paul, MN 55112

Seattle, Washington Chapter
SCOTT, DENNIS T.
3081 Goshen Road
Bellingham, WA 98225

ALLIED TRADESMAN

MEMBER-AT-LARGE

YORK, MICHAEL J.
Langston Road
Loughton, Essex IGIO 3TI England

ASSOCIATE MEMBER

MEMBER-AT-LARGE

HAZEN, LEON
1705 South Malcolm
Chanute, KS 66720

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.**

Jan. 16-17, 1981
ARIZONA STATE CONVENTION
Tucson, Arizona

Contact: Glenn J. Persons
42 E. Wetmore Road
Tucson, Arizona 85705
(602) 887-8569

Feb. 28-March 1, 1981
CALIFORNIA STATE CONVENTION
The Inn at the Park
Anaheim, California

Contact: Paul Monroe
5200 Irvine Blvd., #310
Irvine, California 91714

March 27-29, 1981
PENNSYLVANIA STATE CONVENTION
Brunswick Motor Inn
Downtown Lancaster, Pennsylvania

Contact: Richard E. Bittinger
107 West Main Street
P.O. Box #51
Brownstown, Pennsylvania
17508
(717) 859-3111

PIANO TECHNICIANS GUILD
24th Annual Convention
and
Technical Institute

San Francisco Hilton Hotel
July 6-10, 1981

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95 Bridge Street
Benalla, Victoria 3672, Australia

TAY, HOCK BENG
90 Kampong Hulu
Malacca, Malaysia

TAY, HOCK SENG
90 Kampong Hulu
Malacca, Malaysia

STUDENTS

Atlanta, Georgia Chapter
DURKIN, LARRY J.
5180 Lower Roswell Rd.
Marietta, GA 30067

MILLER, LARRY R.
395 Sunset Drive
Norcross, GA 30071

Central Illinois Chapter
GUILL, SID W.
R.R. #3, Box 15
Mattoon, IL 61938

HALE, CLARK T.
2816 Marcella Drive
Decatur, IL 62521

Connecticut Chapter
MAC LEOD, BRUCE A.
54 Home Ave.
Middletown, CT 06457

Northeast Florida Chapter
BROWN, RONALD A.
4430 Packard Drive
Jacksonville, FL 32216

Portland Chapter
THOMPSON, CAROLE J.
7626 S.E. Evergreen
Portland, OR 97206

Nebraska Chapter
FANKHAUSER, WILLIAM A.
Box 137
Route 3
Humboldt, NE 68376

RUSER, KATHLEEN J.
249 North Darr
Grand Island, NE 68801

SOMER, GENE R.
Box 32
Sterling, NE 68443

MEMBER-AT-LARGE

WROBLEWSKY, CATHY A.
Box 141
Sperling, MB R0G 2M0

RECLASSIFICATIONS

REGISTERED TECHNICIANS

AUSTIN, Anne-Marie
Philadelphia Chapter

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Montreal Chapter

HAYES, VESTER L.
Memphis Chapter

JACKSON, MELVIN
North Central Louisiana Chapter

LAWHEAD, FRANCIS, E.
Dallas Chapter

SIVEL, RICHARD F.
Philadelphia Chapter

ALLIED TRADESMEN

GORMAN, DOUGLAS
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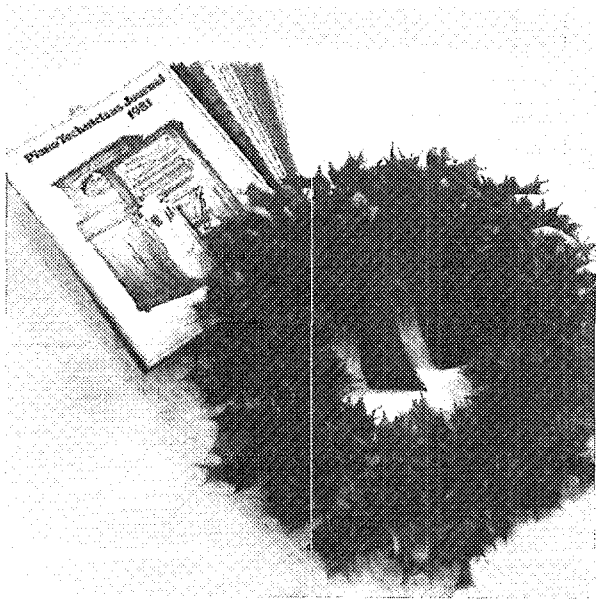

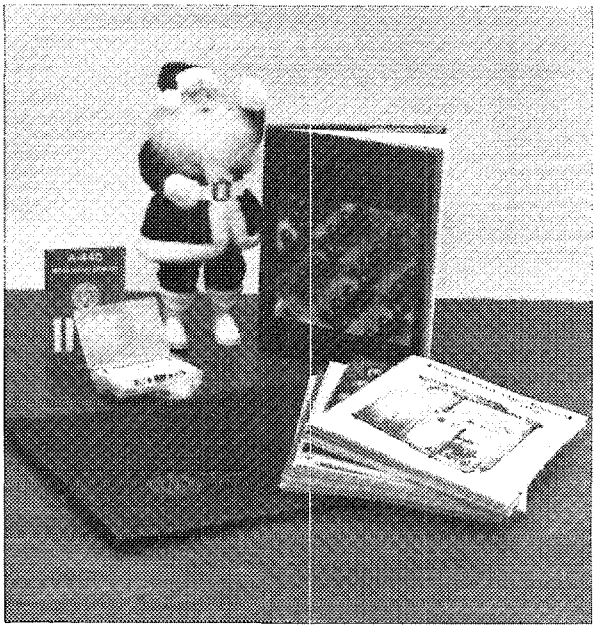

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THE AUXILIARY EXCHANGE

Luellyn Preuitt

"Greetings and Happy Holidays to All! Tomorrow morning (September 30, 1980) Jack and I are heading to San Francisco for the planning meeting of the 24th annual convention. I know the members of the western region are going to hostess another grand convention.

"Due to my dislike of flying and our love of this great nation of ours, we will be driving to this meeting. I am looking forward to seeing the beautiful city of San Francisco and the magnificent state of California where we will assemble next July. In the coming months we will be bringing you many details of what you will be seeing and doing at that time.

"Until next issue may I wish you all joyous holidays and a very good year, 1981!" — **Jewell Sprinkle, Piano Technicians Guild Auxiliary President**

Last month we promised you Dora Odenheimer's account of the Europiano convention tour in May, 1980. She gives a most interesting view of European hospitality.

"Upon arrival in Germany, my husband Fred and I were guests for the weekend of Klaus and Marianne Fenner. They live in Bad Hersfeld, a lovely small town where they have lived since birth. Klaus is a piano builder and tehnician.

"On Saturday morning, we visited Klaus' shop, and walked through a nearby shopping area. Sunday, Mother's Day, Klaus and his sons, with a small ensemble, blew the trumpets in the local church tower to call the people to worship. You could hear them all over Bad Hersfeld.

"Sunday evening, Marianne Fenner prepared supper for about 25 people, mostly piano technicians and their wives who had stopped over to spend the night in Bad Hersfeld before going on to Hamburg for the convention the following day. We saw a pretty sculpture of a young dancer that would be presented to the gentlemen at Steinway on their 100th anniversary. You can be sure that the piano talk and discussion was lively there that evening.

"Next morning, we went along with Mr. Neureither, manager of Euterpe Piano Company, and Mr. Sasso, the new president of Europiano, to Hamburg. The Opel station wagon went along the Autobahn route through woods, then meadows and grass fields spotted with cattle. Crossing Schleswig, the Lueneburger Heide, we arrived in about six hours at the Koehlerhof in Bad Bramstedt, one hour north of Hamburg.

"Our room on the third floor let us out on a balcony, where we had a view of lawn, sidewalks, a small lake in the distance and a forest to the right. The sun came up like a red ball through the huge glass windows about 5:00 a.m. The furniture was modern, and we had a good-sized bathroom with towels hanging on small red hooks. Downstairs there was a huge indoor swimming pool. Meals were American plan, with breakfast being buffet and including almost everything one could think of.

"Fred attended classes all day, wearing a colored tag to indicate which ones he was participating in. Classes were given in French,

Italian and German. Fred also was invited to attend the council meeting as representative of the United States. In addition to German technicians, there were those present from France, Italy, Holland, Switzerland and the Scandinavian countries. One of the Italian technicians, Mr. Giulini, is the brother of the conductor of the Los Angeles Philharmonic.

"One morning we took a shopping tour of the little town of Bad Bramstedt. There was the open market with fresh strawberries from the nearby farms and other vegetables and fruits.

"Another day we were taken on a bus tour through Hamburg. We had picture-postcard weather, the guide said, with blue sky and sunshine. Usually in this northern city one encounters rain or overcast skies. We saw the large new bridge over the Elbe River, also the tiled, new tunnel under the river and the pier where many overseas ships dock.

"One day we joined the men to visit the foundry in Rendsburg where, among a host of other things, Steinway plates are poured. We were greeted by a gentleman who is retired from his work at the factory, but came to talk to this group. The walls are lined with iron stoves and he explained the history of many of them. Some were very ornate and beautiful. By his tone, one could tell he was proud of this collection of many years, and that he was one of the artists who helped manufacture some of them. We also saw the foundry in action.

"Another day the buses took the entire group to the Steinway factory in Hamburg. We were divided into small groups for better accommodation, and since this was also a Friday after a holiday, the factory was not in full production. It made it much easier to get a good look. We were told every instrument in the factory had already been sold!

"On an upper floor are the rooms used as a training school. Workers study there for about a year before starting to work in the factory.

"I asked our guide if he knew about the piano that had been overhauled for Arthur Rubinstein. He said he remembered it. While being shipped back to the States, it was dropped and had to be sent back to Hamburg for repairs. Fortunately, it was not very badly damaged.

"Afterward, we were taken on a general tour of Hamburg, including a senior citizen center. In the auditorium of this building we heard a piano concert by a young man who had recently won a Steinway competition.

"The formal banquet was held in the hotel dining room on the final evening. Tables were covered with white tablecloths. Wine was served with dinner and the band played late into the night. The young girls, being outnumbered, really had a festive time of it.

"We said good-by and thanked our wonderful hosts, the Fenners. We asked them to attend our national convention in San Francisco in the summer of 1981." — **Dora Odenheimer.**

From Agnes Huether, corresponding secretary of the auxiliary, we bring you this warm Christmas greeting. Agnes sends cards and greetings to our honorary life members and others on birthday, anniversary and other special occasions. Here she indulges in a little fancy for the auxiliary board and friends:

"In the anxious rush of this Yuletide –
To draft a greeting, I've sorely tried,
So a merry season, to all and sundry,
With carols sung by dear Grace Bumbry.

"Old Kris Kringle has a special twinkle,
For the irrepressible Jewell Sprinkle,
Plus a smile and a jig merry
For our bonnie V.P. Julie Berry.

"O please, dear Santa, make her relax –
That's our ball-of-fire, Shirley Truax.

"Despite all your hustle and bustle,
Remember, Ginger Bryant and Ginny Russell!
To find something nice, we know you'll be able,
For Bert Sierota and Belva Flegle.

"Hurrahs and toasts that couldn't be finer,
For Cele Bittinger and Barbara Zeiner.

"A special herald and huzza, to wit:
Our faithful editor, Luellyn Preuitt.

"Garlands of mistletoe and bright star-lights,
To our Kathryn Snyder and Pearl Kreitz.

"Joy and peace to Dessie Cheatham,
Ruby Discon and Camille Gearman.

"Do send a very special ditty –
To our gracious Sunshine Committee:
Marian, Mabel and RoseAnne deserve
A bucket or two, of your best preserve!

"And to Shirlee Felton of Philadelphia city,
A Christmas scarf, that's oh so pretty.

"Now to end this feeble doggerel,
I wish you ALL a Joyeux Noel."

Following that, we hear from one of these faithful sunshine committee members, Marian Damon. Marian writes of the activities for ladies at the recent Wisconsin seminar.

"Greetings from Milwaukee, Wisconsin! The best part of attending a Guild seminar or convention is the opportunity to meet old friends and make new ones. This held true over the weekend of September 20-21 when the Wisconsin chapter of the Guild was host to a seminar for Guild members from Wisconsin and surrounding states.

"Since the Milwaukee chapter has no auxiliary, no plans could be made to entertain the wives. However, some went shopping and then attended the banquet on Saturday night where a letter of greeting from Jewell Sprinkle, president of the Auxiliary, was read.

"On Sunday, Mrs. M. J. Ott of Fort Wayne, Mrs. Harry Heffelfinger of Glenview, Illinois, Mrs. Ken Emmons of Marinetta, Wisconsin, and I attended church services at a nearby lovely Mil-

waukee landmark church.

"After lunch with our husbands, we four visited in the lounge of the hotel. The hours sped by, as they do when people are congenial, and all too soon it was time to say good-by. It was a good weekend."

Marian is an at-large member of the auxiliary, and very interested in the success of our organization. Our thanks to her for her efforts in this matter, and for informing us about the activities.

Our membership chairman, Julie Berry, has sent a list of new members. We are glad to welcome them into the auxiliary, and hope they will find many friends here.

Geraldine B. Calcote (Vernon)
4836 Alpha Avenue
Jacksonville, Florida 32205
NORTHEAST FLORIDA AUXILIARY

Kathleen Emrich (James)
R.R. 3, Box 240-A
Kokomo, Indiana 46901
INDIANAPOLIS AUXILIARY

Janice R. Sheppard (Norman M.)
913-B Eagle Heights Apartments
Madison, Wisconsin 53785
WISCONSIN M.A.L.

Ann M. Zocco (Salvatore)
8351 SW 47th Street
Miami, Florida 33155
FLORIDA M.A.L.

Robin M. Jones (Arthur)
6161 East Cherry Hill Apartments
Cherry Hill, NJ 08002
PHILADELPHIA AUXILIARY

THE PIANO TUNER

Just a reminder that the Norman Rockwell print, "The Piano Tuner", is still available. As stated earlier, they are suitable for framing and are excellent gifts. You can order from Julie Berry, 6520 Parker Lane, Indianapolis, IN 46220. Include a check for $3.50 for each print you wish to order. Size is 8" by 10".

THE PICTURE PROJECT

One important th ing about the Guild and its auxiliary is that they bring together people who learn to socialize with each other and who often become lifetime friends. Many chapters begin or end their meeting year with a pitch-in supper or picnic, and lots of chapters celebrate with recognition banquets and Christmas parties. These occasions make our Guild and auxiliary memberships more meaningful.

The next time your auxiliary gathers for a social event, take along a camera to capture the spirit in pictures. Send prints of the pictures to: Julie Berry, 6520 Parker Lane, Indianapolis, IN 46220, and we'll gather them into a scrapbook or mount them on a bulletin board for all to enjoy in San Francisco. We'd all like to see pictures of our members at home in their local chapters. Members at large are encouraged to send pictures of themselves at Guild events, too. Thank you. — Julie."

Have you sent your post card to say "hi!" to Helen Pearson? Let's join in this interesting project! Send that card to Helen. Overwhelm her. Sign your name, tell when your birthday, anniversary, and other interesting dates occur, and look forward to a greeting from the sunshine committee on those occasions. Send it to Helen Pearson, 524 Elizabeth Place, South Daytona Beach, FL 32019.

We wish you all the joys of this season. Take a few moments on whatever day is most special to you. Withdraw from pressures and family, and reflect upon what it means to be a part of the great universe in which we exist. Realize yourself as a microcosm in the macrocosm, and allow your inner self to guide you. Then go forth and celebrate! □

Classified Advertising

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

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

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

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

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

FOR SALE

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

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

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

QUARTERSAWN 5-PLY *Vermont rock* maple pin blocks. Resorcinol glue. **Call or write: George H. Wheeler, R.T.T. 11 Cherry Hill, Springfield, Vermont 05156 (802) 885-5325**

MAKE ME AN OFFER on this Pratt-Read style A Upright Player Stack & Bellows. 26 Bass, 32 Center, 30 Treble. Original Mint Condition. **Bob Lutzke, 819 North Fourth Avenue, Big Rapids, Michigan 49307, (616) 796-6137**

KNABE-AMPICO GRAND. 5'3", 1924 *Pneumatics rebuilt and restrung approx*imately 20 years, block good, operates well, case original and good, 32 Ampico rolls, asking $4,500. **Roby's Piano Shop, St. Albans, Vermont 05478.**

WANT TO DOUBLE OR TRIPLE YOUR INCOME? Placing **The Piano Owner's Guide** by Carl D. Schmeckel with customers has helped hundreds of tuner-technicians to do just that! Hardbound: $6.95; Softbound: $3.95. Wholesale discounts; terms. **Apex Piano Publishers, 2621 S. 8th St., Sheboygan, WI 53081. (414) 458-4489.**

HELP WANTED

HELP WANTED — Artist piano-rental company seeks trainee. Work with the greatest pianos and artists in the world. An apprentice or novice technician is sought for long-term training and employment in New York City, with possible relocation to San Francisco or Los Angeles. Must be willing to embrace with equal zeal the following: tuning, rebuilding, truck driving, refinishing, piano moving, regulating, shop remodeling, voicing, road touring and sometimes long and unusual hours. Benefits: work with the world leader in concert piano preparation and provision, all types of artists, all types of music. As a reward for long-term loyalty, profit sharing or other bonus could apply. **(212) 582-6798**

REPUTABLE PIANO STORE (since 1961), incl. over 100 rented pianos and stock, good income & location. Price on agreement. **K. Burger Pianos, 220 Hamilton Ave., Palo Alto, CA 94301, tel. 415/321-6166.**

WANTED

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

PARTS FOR DUO-ART reproducing piano. Also will buy Ampico or Duo-Art Piano in original condition needing restoration. **Al Sandin, (805) 688-5530, P.O. Box 933, Solvang, CA 93463.**

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

TUNER, 5 YEARS' EXPERIENCE, looking for tuning, rebuilding work in the East. Willing to relocate. Resumes, references supplied on request. **Contact: Bill Verity, 11252 Harlan St., Broomfield, CO 80020, (303) 446-7136.**

WANTED TO BUY

WANTED. Electric hammershank-bending pliers, heatgun, mototool with accessories, new and used keytops-all types, key presses/clamps, Ford hammer-gluing platform, hammers-full and part sets, sets of tuning pins. **Hilton White, Box 2092, Glenwood Springs, Colorado 81601, (303) 945-9552**

WANTED

WANTED. Full-Time tuner-technician to work in a beautiful, mountainous part of the country. Full-line music store. Send resume to **Hedge Music, 136 N. Bent, Powell, Wyoming 82435, (307) 754-4664**

23rd Annual
Convention and
Technical Institute
July 14-18, 1980

CASSETTE TAPES ORDER FORM

The following programs were recorded at the Convention on standard cassettes.

Copies are available by mail order from Cassette Recording Company.

- ☐ **Aftertouch in Grand & Vertical Pianos** LaRoy Edwards, Jack Caskey, Kenzo Utsunomiya (2 cassettes) **$11.00**
- ☐ **Tuning Techniques** Ben McKlveen **$6.50**
- ☐ **Servicing the Teflon Bushings** Fred Drasche... **$6.50**
- ☐ **Aural and Visual Tuning** George Defebaugh, James Coleman, Sr. (2 cassettes) **$11.00**
- ☐ **Vertical Servicing & Regulation** B. Corey, B. Hill, L. Herwig, C. Anderson (4 cassettes) **$22.00**
- ☐ **Hazards of Piano Tuning** Walter Pearson..... **$6.50**
- ☐ ***The Behavior of Strings*** *James Hayes*..... **$6.50**
- ☐ **Humidity Control Insulation** Allen Foote, Wendell Eaton **$6.50**
- ☐ **The Customer and You** Dick Flegle **$6.50**
- ☐ **Servicing the Aeolian Player Piano** Robert Snyder (2 cassettes) **$11.00**
- ☐ **Grand Hammer Installation** Willis Snyder, Homer Wagman, David Snyder (2 cassettes)... **$6.50**
- ☐ **Inharmonicity & How to Deal with It** Dr. Albert Sanderson (2 cassettes) **$11.00**
- ☐ **Harpsicord Maintenance** Kyle Greenlee **$6.50**
- ☐ **Basic Piano Refinishing** Wayne L. Clevenger (2 cassettes)..... **$11.00**
- ☐ **Servicing the Rhodes Piano** Horst Absmann.... **$6.50**
- ☐ **Lubricating - When, Where and How** John Ford..... **$6.50**
- ☐ **Grand Regulation** Roger Weinsensteiner, Eric Johnson (3 cassettes)..... **$11.00**
- ☐ **Polyester Finish & Touch Up** *Lee Sankey* **$6.50**
- ☐ **Piano Hammer Construction & Preparation** Bob Johansen, Ray Negron..... **$6.50**
- ☐ **Soundboard Soundings** Mathew Slaats **$6.50**
- ☐ **Toward a Better Tuning** Gary Schultz..... **$6.50**
- ☐ **Electronic Instrument Overview** Kathryn Nickerson (2 cassettes)..... **$11.00**
- ☐ **Rebushing Workshop** Evan Giller..... **$6.50**

☐ **CONVENTION SPECIAL** – Any 16 or more cassettes listed above receive a 10% DISCOUNT. This includes a FREE 16 pocket Piano Technicians Cassette Album.

YES, YOU MAY CHARGE IT:

☐ master charge ☐ VISA

MY BANK CREDIT CARD NUMBER IS:

INTERBANK NO (Master Chg. only) | EXP. DATE Mo. Yr.

Name _____

Company _____

Street Address _____

City/State/Zip _____

Area Code/Telephone No. _____

TAX DEDUCTIBLE EDUCATIONAL PROGRAMS

Order Total _____

Mail orders add 5% postage and handling (min. $1.00) _____

Ohio customers add 5% Sales Tax _____

Amount Due _____

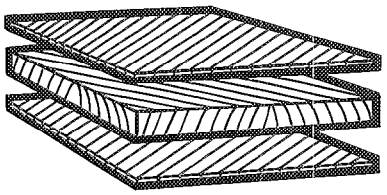
Make checks payable to:
Cassette Recording Company

PAYMENT MUST ACCOMPANY ORDER

Cassette Recording Company, Inc.
34 North Main Street
Suite 1444
Dayton, Ohio 45402
(513) 223-5380

CRC

Pencil point proves performance of new Wurlitzer Soundboard

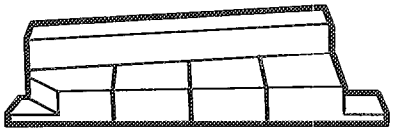


The grain of the wood in both top and bottom layers of the new soundboard runs parallel to the general direction of the treble bridge. The fine grain of the inside layer runs in the direction of the ribs.

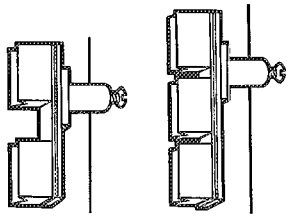
Picture below shows relationship of crowned rib to soundboard. Putting a crown into the underside of the ribs holds a crown in the soundboard. This soundboard is of uniform thickness throughout.

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

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.

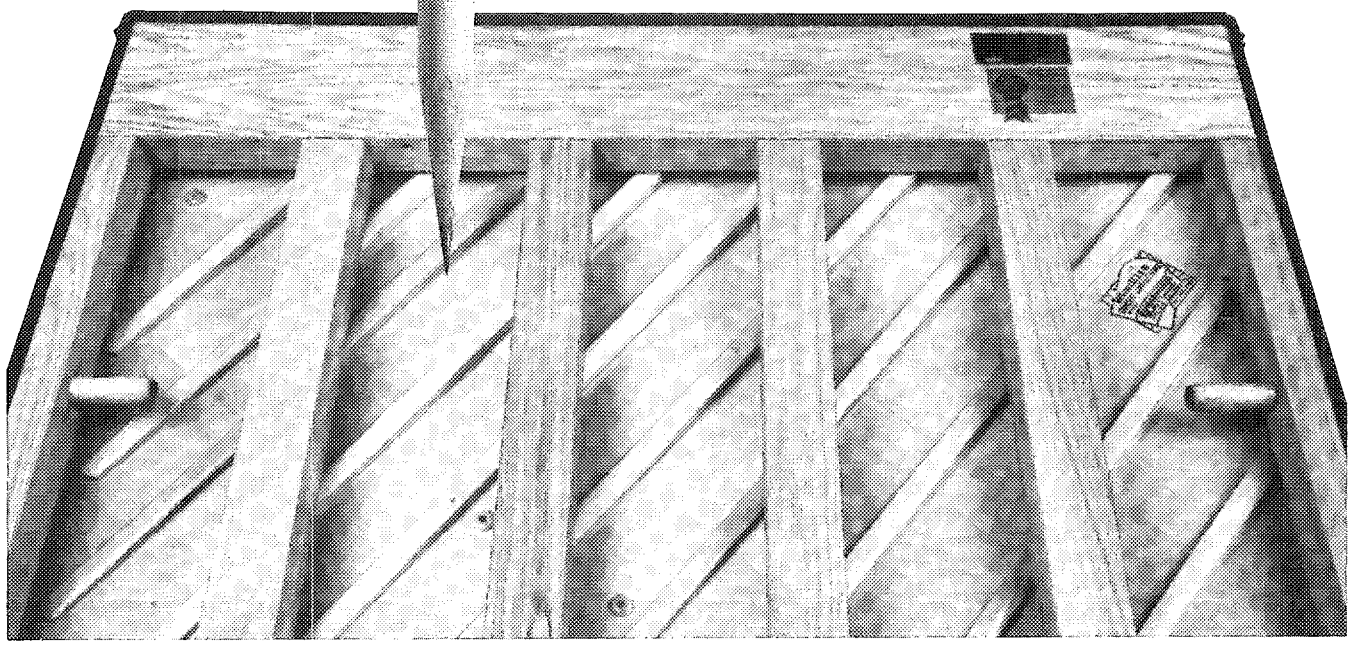


That is because Wurlitzer now uses three separate layers of mountain-grown spruce in all of its finer pianos. These layers are placed at scientific angles so they transmit string vibrations (which travel mostly with the grain) to all corners of the board. The result is more volume, richer tone, and greater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

WURLITZER®
The Music People
DeKalb, Illinois 60115



PIANO TECHNICIANS GUILD

DECEMBER 1980 UPDATE

Nominations For The Board

In compliance with the PTG bylaws, the PTG nominating committee is requesting nominations for all 1981-1982 elective positions on the Piano Technicians Guild Executive Board: president, vice president, treasurer-secretary and all regional vice presidents.

A chapter may submit a nomination and any member in good standing may offer his or her own name for consideration by the committee.

When nominee suggestions are received by this committee, the proposed member will be sent a consent-to-serve form and information on the duties of the office. Each nominee may submit no more than 15 lines of typed qualifications to the nominating committee for consideration together with the signed, consent-to-serve form.

The committee will prepare a list of nominees showing the comittee's selections for president, vice president and treasurer-secretary. All nominations received for the three offices, and for the offices of the six regional vice presidents will appear in the May 1981 issue of the *Journal* together with the committee's selection. In this way, the membership will be given information on every nomination received by the committee.

Please read the Guild bylaws, pages 7 and 8, for full information on the required nominations procedure.

Nominations *must* be submitted *no later than March 10* to: Jack Sprinkle, chairman, Nominating Committee, 6033 N. 19th Road, Arlington, VA 22205, (703) 538-2728.

Annual Dues Billing

DUES PROCEDURES

The annual dues billing is in the mail to all members who are on the calendar year dues base. All members recorded in the computer as of November 15 will receive the annual membership dues billing together with a paper showing the procedures affecting dues for 1981.

CHAPTER DUES

Those members who belong to chapters which have arranged for chapter dues to be collected by the home office will find the chapter dues included and shown separately on the dues billing. *NOTE:* Chapter dues must be paid promptly and the good standing of membership depends upon the payment of chapter dues as well as Guild dues.

STUDENTS

Students' dues are payable on a floating year base with the membership in effect from the month of joining the Guild for the next 12 months. For this reason students are not billed on the regular December annual billing.

Tom Blanton's New Address

South Central Regional Vice President Tom Blanton has moved. Please note his new address: 1516 Shields Drive, Sherman, TX 75090, Telephone (214) 892-3176.

Amendments To The Bylaws And Regulations

Amendments to the Guild Bylaws and Regulations may be proposed by a chapter, a committee, or by the executive board. Proposed amendments must be submitted in writing, with supporting arguments, to the chairman of the bylaws and regulations committee no later than February 20, 1981, which is the required 135 days before opening of council session. Send amendments to Charles Huether, 34 Jacklin Court, Clifton, NJ 07012.

Midwinter Board Meeting

The midwinter PTG board meeting will be held at the San Francisco Hilton Hotel January 31 and February 1. Report forms for this meeting have been mailed to all PTG committee chairmen. Chapters and members with information or proposals for consideration by the board are asked to submit the material through their regional vice presidents.

November Chapter Mailing

The Chapter Mailing sent to all chapter presidents in November included: Four copies of the new Chapter Achievement Awards forms and information on transfers, dropped memberships, and other correspondence addressed to individual chapters.

IAPBT Charter Membership

The new International Association of Piano Builders and Technicians will vote on accepting individual members at a meeting to be held in Switzerland next spring. When the individual membership category is approved all PTG members who have sent the $10 contribution toward the PTG representation at the IAPBT meeting in Switzerland will be eligible for charter membership in the IAPBT. If you are interested in becoming a charter member, join your friends whose names are listed below: Dan Evans, David Krystall, Kelly Ward, Robert Lutzke, Dean Howell, Marty Hess, Fred Odenheimer, Walter Pearson, Ernie Preuitt, Orman Pratt, Lloyd Cotten, and Donald Strong.

Seminars and Prospective Members

The home office is eager to receive the current names and addresses of nonmembers who attend chapter meetings, local seminars and regional conventions, etc. Those in charge of these events are asked to maintain a list of nonmembers who attend and send it to the home office. The list will be entered into the computer, and the nonmembers will become part of the Guild prospects list and be sent the Guild 1981 convention mailings.

Important Notice To All Chapters

The October chapter mailing sent to all chapter presidents contained an important cover letter from President Bob Russell regarding yellow-page telephone listings and other advertising media.

Chapters were also sent a supply of a new, printed letter to be sent by each chapter to the attorney general in each state and province and to local newspapers, etc.

It is extremely important that *every* chapter send out all of the printed letters to these people. Duplication of effort will only help our cause so each chapter is urged to distribute all of the letters it received.

For the greatest effect, chapters are urged to have the name and address of the attorney, newspaper, telephone company, etc., properly typed on the letterhead. A good looking letter reflects the image of the Guild.

The full content of the printed letter is in the October Update. In the best interests of all members, all advertising media and others in the piano profession should be advised of this letter which clearly states the policy of the Guild on protection of the PTG name, logo and reputation of all Guild members.

For Fast Service

For faster service when writing to the home office please include your chapter number and your membership number.

These numbers are shown on chapter printouts with the three-digit chapter number first and the four-digit member number next; e.g., 009-0001. The numbers are also shown on all billings and the member number is on all membership cards.

Your help will save many hours of research and checking in the home office... and time is money — your money. Help us to help you to faster service.

Walt Disney's Magic Kingdom Club (MKC)

Membership is available to all PTG families free upon request. MKC membership provides discounts on car rentals, hotel accommodations, and tickets to Disneyland Park in California and Walt Disney World in Florida, PLUS vacation travel packages in this country and abroad.

Be ready when your family plans its next vacation. Request your membership card today! Send your application for membership to Piano Technicians Guild, 113 Dexter Avenue N., Seattle, WA 98109.

---------- C U T ----------

APPLICATION FOR MEMBERSHIP
(Please Print)

☐ ☐ ☐ ☐
Mr. Mrs. Miss Ms. _____

Home Address _____
(Please do not use Business Address)

City _____ State _____ Zip ____

To help develop additional programs and benefits for Magic Kingdom Club families, please complete the optional information section below.

☐ Have children between the ages of 1 thru 7
☐ Have grandchildren between the ages of 1 thru 7.
☐ Own a recreational vehicle.
☐ Own homie video recorder/player or 8 mm movie equipment

Please indicate first name and birthdate of your youngest child (grandchild)

First Name _____ Mo. Day Yr.

Separate Checks Please

Because membership dues payments and merchandise orders are handled by separate departments at the home office, please send separate checks for each. Remember to attach the copy of your billing with your payments. This will expedite your orders and correctly credit your accounts.

Did You Know That . .

1. Your attendance at chapter meetings counts toward your chapter's achievement record?
2. Guests (potential members) you bring to your chapter meetings count toward your chapter's achievement record?
3. When there is a quorum at your chapter meetings it counts toward the achievement record?
4. When your chapter has a board meeting it counts toward the achievement record?
5. When members are upgraded, new members accepted, or applications received, they all count toward chapter achievement?
6. When you give a technical before your chapter or another chapter you are aiding the achievement record of your chapter and the other chapter?
7. When you attend other chapter's meetings, your chapter will get credit also?
8. Various projects in piano technology earn points toward the chapter achievement record?
9. When you attend seminars/conventions and/or participate also, the points toward your chapter's achievement record are enhanced?
10. Community activities also count?
11. Article 1, Section B #4 of the Guild regulations direct the chapter achievement committee to establish basic activities upon which chapters shall be graded?
12. The activities listed above set up criteria for the chapter achievement awards?
13. These basic activities are set forth as questions on the monthly report form which your chapter is requested to submit?
14. This authority is derived from Article 13 of the Bylaws?
15. If you personally participate in as many of these activities as you can you will be contributing greatly to the achievement of your chapter?
16. In 1979 only 12 chapters out of 158 reported their achievement? Can you imagine what Guild finances would be like if the membership was as lax with dues reporting as chapters were with monthly reports in 1979?
17. Already in 1980 the total number of chapters reporting has quadrupled? That means about two-thirds of the chapters are still not reporting.

Is your chapter reporting? Good, strong, achieving chapters are the basis for a good, strong, achieving PTG.

Marshall B. Hawkins, Chairman
Chapter Achievement Committee

Chapter Notes

The publications department thanks those chapters which have been sending in items for the chapter notes section on the special chapter notes form. If your chapter would like more copies of this form, please send in a request and additional forms will be sent by return.

Moving? Changing Your Address?

Be sure of your regular Journal delivery by asking the Post Office to forward your Journal to your new address. Journals that cannot be delivered because the addressee has moved are not returned to us. We are sent a notice only and must pay .25¢ for each non-delivery notice.

To mail a duplicate copy means double Journal costs plus the return postage notice cost plus around .60¢ remailing charges plus office overhead. The Home Office has done this whenever possible but we are finding that it is becoming more difficult to do so now that we no longer have so large an overrun of the Journal printing each month.

BECAUSE WE WANT TO BE SURE YOU RECEIVE YOUR REGULAR JOURNAL EACH MONTH!

1. Please ask the Post Office to forward your Journal to you when you move.
2. Please notify the Home Office as soon as possible, 5-6 weeks before you change your address.
3. Should you not receive a Journal, please advise us immediately. On such prompt notification we can usually send a duplicate When notified after any delay, we are not able to promise a duplicate Journal.

New Member Applications

New members, eager to receive their official proof of PTG membership, often experience a delay due to the application not being mailed to the home office immediately following official approval by the chapter. Chapters are urged to send completed applications as soon as possible so that the new member will receive proof of Guild membership promptly.

1. Please be sure the top right hand corner of the application form shows the approved classification and the chapter officer's signature.

2. Please send the correct amount of membership fees or dues as follows:

Registered Technicians, Apprentices and Allied Tradesmen: New member fee $30. Send only $15 to the home office, the chapter keeps $15. The home office will bill new members for prorated dues through the end of the year.

Associate and Affiliate Members: $3.50 for December, 1980; $48 for 1981.

Student Members: $60 covers 12 months from the month of entry.

NOTE: Members who want the Booster Club points are urged to print their names on the application form on the line marked "recommended by."

Getting Ready For The New Tuning Test

Part II: Preparing the Applicant

Most chapters will route their applicants along lines similar to those they have been using for years, because the new tuning test does not change the order of things very much.

When a person applies for membership in the Guild the local chapter votes on whether to accept the applicant. Once an applicant has been accepted for membership, the chapter proceeds with the written test (REMEMBER: Three new versions of the written test will be coming out during the next few months) and the bench test. Once an applicant has passed both the written and the bench tests, he/she should prepare to take the tuning test.

If the local chapter has been approved as a test center and a C.T.E. (Certified Tuning Examiner) is on hand, the chapter can proceed with the tuning test. If the applicant needs to be tested outside the chapter, the nearest suitable testing situation must be determined. It is possible that a neighboring chapter will be equipped to give the test, or perhaps testing can be arranged at a seminar or convention in the near future.

Perhaps the local chapter will have a test piano set up (see last month's article) but no C.T.E. among its members. In that case a C.T.E. needs to be brought in to administer the test with local assistance.

At any rate, each chapter will need to develop its own plan of action based on its individual needs and the number of applicants it has.

Each region of the United States, Canada, Puerto Rico, and the Virgin Islands has a member of the Guild's Examinations and Test Standards Committee who is specifically committed to working out implementation of the test in that particular region. The names and addresses of these people are listed at the end of this article.

In addition, the *Journal* will be used to keep members informed about where test centers are located. Before sending an applicant off to be tested elsewhere, a chapter should informally assess the applicant's tuning and work with him/her if necessary to be sure the tuning has a chance of passing.

A fee will be charged for the tuning examination and must be submitted prior to the test. The exact amount of this fee will not be decided until the board of directors convenes. Details will be published at that time.

From the surveys chapters completed earlier this fall, it appears that about half the chapters want to become test centers, and many of the ones who do not want to become test centers only give one or two tests a year. Therefore, it may not be any problem at all to locate a test center convenient to each new applicant.

Here is a list of the members of the Examinations and Test Standards Committee for each region. Please feel free to contact them with your questions:

Northeast Region: Dr. Al Sanderson, 70 Forest Park Drive, Carlisle, MA 01741.

Southeast Region: Ruth Ann Jordan, 4 East Granville Drive, Silver Spring, MD 20901.

Central East Region: Ron Berry, 6520 Parker Lane, Indianapolis, IN 46220.

Central West Region: Bob Erlandson, 1516 North 108th Street, Omaha, NE 68154.

South Central Region: Olan Atherton, 302 North Travis Street, Sherman, TX 75090.

Western Region: Jim Coleman, Sr., 4 West Del Rio, Tempe, AZ 85282.

New Music Box Piano

Music box pianos are now available as a sales item. The lucite replica of a grand piano (5½"x3½") plays "It's a Small World." As an international association, the song is appropriate for the Piano Technicians Guild.

Besides being a small jewel case, the music box is a symbol of the music industry. This beautifully designed music box would make an elegant gift or a much-prized award item, for use by chapters, auxiliary members, or individuals.

The $17 price includes postage within the continental limits of the United States. Persons ordering music boxes outside the continental limits will be billed for additional postage.

When you want to give a new and different gift, give the music box piano.

New Recital Covers

PTG recital program covers are reprinted. Buff felt finish paper has been used with The Alma Tadema Piano pictured on the cover in brown ink. The cover measures 8½"x5½" folded. The featured piano recently sold at auction for a record $390,000.

Order your program covers now from the home office on the order form provided elsewhere in this *Journal*.

Chapter Notes

... **The Chicago Chapter** recently devoted one of its meetings to an "Apprentice Workshop," as the members called it. As part of the workshop, seven apprentices jointly tuned a seven-foot Yamaha grand and explained their procedure step by step. RTT Virgil Smith then critiqued their methods and gave tips to each of them.

... **The Indianapolis Chapter's** November meeting featured a discussion on the history of the piano and its development through the centuries. Jim Emrich, a member of the chapter, presented a series of slides from the Smithsonian collection of antique musical instruments.

... **The Washington, D.C. Chapter's** newsletter reported that when member Deana Grove answered the telephone at Wendell Eaton's shop recently, a woman's voice inquired, "Does Mr. Eaton do rebuilding?" When Grove said yes, the woman went on to describe the kind of rebuilding she had in mind. Said she: "In addition to some other work, I'm thinking of getting some windows replaced." Grove's reply: "I'm sorry, we don't do windows."