

# *THE SOONER TUNER*

*Official newsletter of the Oklahoma Chapter 731 Piano Technicians Guild*

April 2012

Hello all and welcome to the April edition of the Sooner Tuner.

This month's meeting will be held April 19th 2012, 8:30am, at Larsen Music, 405-843-1573, located at 4001 NW 63rd St, Oklahoma City, OK 73116 on the NE corner of the intersection of NW 63<sup>rd</sup> and the NW Expressway.

A technical demonstration will be given by Walt Myrick of Larsen Music. Walt will demonstrate the Yamaha Disklavier system in all its glory and will show the new features and benefits of this superb system.

An open Q and A will be held for those attending. What better way to expand our understanding of piano technology than with our fellow piano experts. Come one and come all. Enjoy the donuts.

## **Excerpt about Disklavier from Wikipedia**

Disklavier is the brand name for a group of [piano](#)-related products made by [Yamaha Corporation](#). It was introduced in the [United States](#) in 1987.

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The various forms of Disklavier are essentially modern [pianos](#) that use electromechanical [solenoids](#) and optical sensors connected to [LEDs](#) allowing them to play notes and use the pedals independently of any human operator. Most models are based upon real acoustic pianos and have been engineered such that the sensors and electromechanical elements do not interfere with or affect the normal playing of the instrument. They include the ability to store data, including performance data played by a human pianist, and then use that data to replay / reproduce the performance. Disklaviers also have inputs for data from [MIDI](#) and from several storage devices including [floppy disks](#), [CD-ROM](#), serial cables, and [USB](#).



A Yamaha Disklavier Grand Piano

# From the President.....

Did you know that the Wessell, Nickel, and Gross (WNG) Piano action company has been around for decades? Did you also know that they have been successfully making composite parts for Mason and Hamlin Pianos for several years? And, did you know that their composite parts are also available for technicians now? Well, guess what?

We have arranged for WNG representatives to come to OKC for a one day seminar!. So, go to your calender and put May 19 WNG event on your calender. We'll give you more details later, but please spread the word. We hope to have a good turnout! If you would like to be a part of the planning committee, please let us know. (go to pages 4-8 for some WNG pics and info)

It's election time again! Come to the next meeting and vote for new Chapter officers.

Congratulations to Eric and Marcy Williams! We have Newly Weds in our Chapter!

Bob Scheer  
President of the Oklahoma Chapter of the PTG

## Minutes From last months meeting

Oklahoma Chapter 731 PTG  
March 15, 2012  
St. Luke's United Methodist Fellowship Hall, OKC

\*Meeting called to order by President, Bob Scheer at 9:00. Bob opened with prayer.

\*Those in attendance were RPTs Bob Scheer, David Bonham, and Gary Bruce and Associates Charles Belknap, Jordan Bruce and Eric Williams and guest David Brewster.

\*David read the minutes from the February meeting and they were received as read with one date correction.

\*Gary gave the Treasurers Report. The checking account balance is \$3,082.91 as of the February 29, 2012 statement. Gary reviewed all income and expenses as follows:

Beginning Balance:	\$3,168.36
David Bonham	-10.82 (Donuts)
Alfredo's	-\$75.00 (Lunch)
Interest Earned	<u>.37</u>
Ending Balance	\$3,082.91

\*Eric gave the Newsletter Editor report and requested that information be sent to him earlier so the newsletter could be sent out earlier. Jordan offered to submit more information, Gary will send minutes within one week after previous meeting. Bob suggested the newsletter needs to be received at least one week prior to the next meeting. (continued next page)

\*David gave the Vice President's report concerning upcoming technical presentations and meetings. He contacted Wessell Nickel and Gross but had not heard back yet. (Note: By the end of the day we had received confirmation from WNG of May 19, 2012 for the all-day event and Greg at Albert Evans' had been contacted and had a positive response about hosting the event.) Several possibilities were discussed about charging for the event then offering generous discounts for Associates, travel, meals, etc. David, Jordan, Eric and Gary will continue to work on details. Eric requested a future technical to cover the regulation of spoons. Charles expressed thanks for the informative meetings and likes the idea of an Associate incentive mentioned in last meeting.

\*In New Business, David shared the "Piano Matchmaker" program that finds pianos for under privileged players. Gary mentioned the Chapter Grant that's available to assist chapters who advertise to promote the Guild. A brief discussion about advertising practices followed.

\*Bob, David and Gary were chosen to be the Nominating Committee for 2012-13 Chapter Officers and will meet to discuss the 'burn-out' that has been mentioned in previous meetings and to come up with a slate of officers to be presented at the April meeting.

Meeting adjourned at 9:43.

*Gary gave a mini-technical on his aural tuning technique. David Bonham gave a technical presentation on grand regulation on a Kawai grand.*

## ***UP COMING EVENTS***

***Saturday May 19<sup>th</sup> 2012*** Wessel, Nickel and Gross - ***one day seminar on the new composite action parts.*** Contact: ***Jordan Bruce 405-314-2407 or [jordan@brucepiano.com](mailto:jordan@brucepiano.com)***



***October 15, 2012 - October 17, 2012***

**SOUTH CENTRAL REGIONAL CONFERENCE (SCRC) [www.screptg.org](http://www.screptg.org)**

YO Ranch Hotel, Kerrville, TX

Contact: Dale Probst

[wardprobst@wardprobst.com](mailto:wardprobst@wardprobst.com), 940-691-3682

## **About Wessell, Nickel & Gross**

Wessell, Nickel & Gross was founded in 1874 by Otto Wessell, Adam Nickel, and Rudolph Gross, each an accomplished piano action maker. The three met while they were under the employment of Steinway & Sons and quickly became friends. Wessell, ever ambitious, urged Nickel and Gross to leave Steinway and start their own piano action business. The two agreed, and Wessell, Nickel & Gross was formed.



During their first year of business, Wessell prided himself on the fact that he personally delivered each piano action to its customer. However, due to the stellar reviews and recommendations from each of the regulators and finishers who worked on the actions, this courteous gesture soon proved to be impractical, as orders began to overwhelm the then-small company very quickly. Wessell, Nickel & Gross had built a reputation for crafting a superior product.

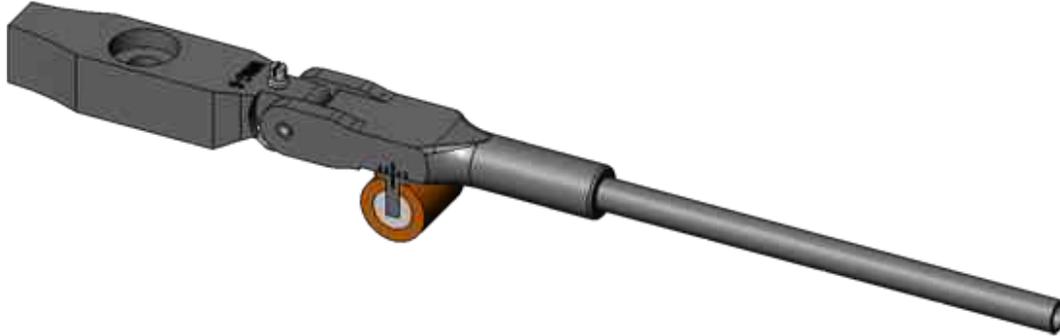
During this time, WNG supplied actions to many famous piano manufacturers such as: Mason & Hamlin, Knabe, Ivers & Pond, J & C Fischer, Mehlin, Julius Bauer, Everett, Hallet & Davis, Star, Strohbort, Stieff, Packard, Mayland, Bush & Lane, Gabler, Heintzman, Bush & Gertz, Hardman, Conover, Wheelock, Phragmatone, Behning and Son, and Steinert.

Throughout the following years, business continued its upward trend and the name "Wessell, Nickel & Gross" became world-renowned and synonymous with the highest quality piano action that one could buy. However, despite these successes, the company experienced losses as both Otto Wessell and Adam Nickel passed on. They were succeeded by their sons, Arthur and Fernando Wessell, and Henry Nickel, who continued the company's tradition of excellence.

Unfortunately, Wessell, Nickel & Gross suffered during the Depression and due to financial stress was absorbed by the Aeolian Piano Corporation, and their equipment and processes were then used in Aeolian's production. Once this happened, Wessell, Nickel & Gross ceased to be an independent company and stopped supplying actions to piano manufacturers outside of the Aeolian Piano Corporation. Unfortunately, Wessell, Nickel & Gross' action quality suffered under Aeolian's ownership.

The name "Wessell, Nickel & Gross" then lay dormant from 1953 until 2005, when the Burgett brothers acquired the trademark. Since then, they have brought back the ideals, innovation, and standards of craftsmanship that the original founders once had, and are poised and ready to bring Wessell, Nickel & Gross back to its original status as the best piano action maker in the world.

## Shanks and Flanges



The WNG Composite Hammer Shank combines a composite Shank Butt and a Carbon Tube Shank. The Shank Butt is made from the standard WNG black composite and the Carbon Tube Shank is a pultrusion made from Carbon Fiber and Epoxy. The resulting part is extraordinarily stiff and does not suffer from the tendency of a wooden shank to bend and whip

A WNG Carbon Tube Shank's strength is as strong as the strongest wooden shank, but doesn't have the variability in quality that wood does. You can be sure that every WNG Carbon Tube Shank is as strong as the one next to it, and that any piano action equipped with WNG's Carbon Tube Shanks will see a notable increase in power, consistency, and longevity.

## Repetitions

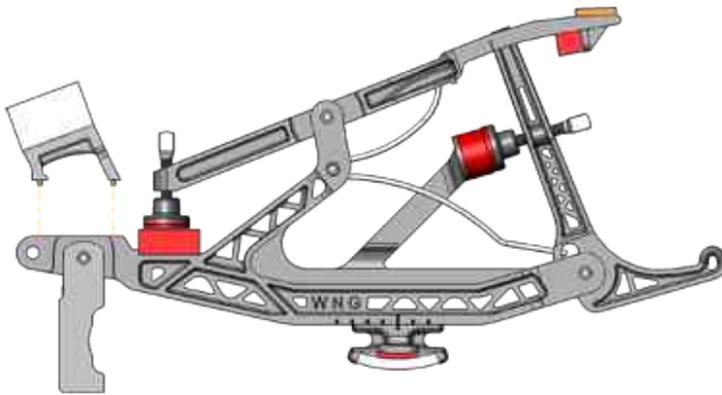
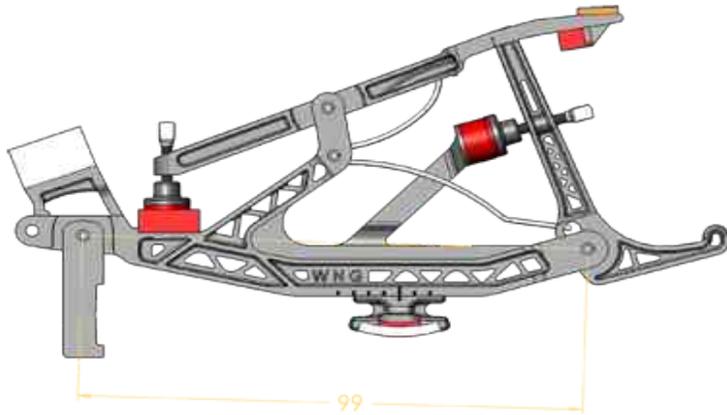
The use of composite materials has allowed Wessell, Nickel & Gross to design a repetition with features impossible to execute in wood. WNG's heel locating system, integrated button, stop and optional rest cushion would not have been possible if the parts had been made from wood.

A great deal of effort has been put into lightening the repetition. A testament to this fact is its unusual shape, designed entirely for the purpose of reducing mass or shifting mass towards the center of rotation. By reducing the moment of inertia, WNG has reduced the dynamic touch resistance felt by the pianist.

It is important to observe that this design could not have been executed in wood

## The 99mm Standard

Wessell, Nickel & Gross repetitions can replace any repetition that conforms to the 99mm standard. This means that the distance from the repetition flange center to the jack center is 99mm +/-1mm. (pics next page)



## Optional Rest Cushion

On most repetition systems the rest cushion is either on or off depending on the design of the molding upon which the repetition is based.

WNG has designed an easy choice into the system. You decide if the rest cushion is included or not. It's your choice.

## Precision Heel Locating System

On the WNG repetition, there are 7 slots in the bottom of the repetition base.

On the heel, there is a corresponding tab that is offset thus allowing two different heel locations for each slot. These locations are referred to as A and B.

Therefore, there are 14 different heel locations available to the sophisticated rebuilder. These are referred to as positions 1A through 7B.

## Reduced Rotating Mass in the Repetition Base

The unusual shape of the WNG repetition results from the design effort to reduce rotating mass.

- - The main beam is lowered to reduce the size and mass of the heel.
- - The balancier post is angled back to move the mass towards the center of rotation.
- - The jack stop is molded into the base and angled back to move the mass towards the center of rotation.

## Hard Bushings

Cloth bushings have problems:

- - Cloth bushings are unstable in a changing humidity environment
- - As cloth bushings change, center pin torque changes
- - As pin torque changes so does the touch of the piano

In comparison, hard bushings are quite advantageous:

- - Hard bushings are dimensionally stable as humidity changes
- - When exposed to changing humidity, pin torque change is negligible
- - The change in the touch of a piano is negligible

**Test Results:** After 18 million blows, pin torque exhibited virtually no change. In extreme environments, from 10% to 90% Equilibrium Moisture Content, pin torque was stable.

### **WNG bushing material does not deform under load:**

1. 1. Teflon was too soft and easily deformed. The WNG bushing material is substantially more dense and is thus able to carry the load.
2. 2. Composite action parts are stable during humidity changes and do not alter the cylindrical shape of the bushing. The problems of wood moving around the Teflon bushing--while the bushing did not--are not a problem with WNG composite actions. WNG action parts are not made of wood.
3. 3. WNG uses an extremely accurate process to achieve the necessary accuracy. Any bushing, without give, requires precision. It was true of Teflon and it is true with the WNG bushing system as well. Tolerances need to be tight so no motion of the shaft (center pin) in relation to the bearing is possible. It is this motion that causes clicking.

WNG uses extremely precise stainless steel needle bearings and extremely accurate processes during the pinning process.

## Wide Variety of Flanges

WNG provides appropriate flanges so that the composite repetition is able to attach to a variety of repetition rails.

The available flange designs are: Current Mason & Hamlin, Steinway, Aeolian Mason & Hamlin, Wessell, Nickel & Gross Classic, Renner Short, Renner Long, Knabe T1, Yamaha, and Baldwin.

## Three Different Jacks

WNG provides three different jacks for interchangeability with many repetitions.



High Angle Tender



Low Angle Tender



WNG Classic Jack shape  
Low Angle Tender

- **Standard Jack:** Most commonly used jack in the world.
- **Modern Jack:** Same as Standard Jack except with a low angle tender
- **Classic Jack:** Same shape, length and tender as found on WNG Classic actions

### Current chapter officers are:

President- Bob Scheer

Vice President – David Bonham

Secretary/Treasurer – Gary Bruce

Newsletter Editor – Eric Williams/ Jordan Bruce

South Central Regional Vice President - Steve Walthall, RPT

“All expressions of opinion and all statements of supposed facts are published on the authority of the editor as listed and are not to be regarded as expressing the views of this chapter or the Piano Technicians Guild unless statements or opinions have been adopted by the Chapter or the Guild.”