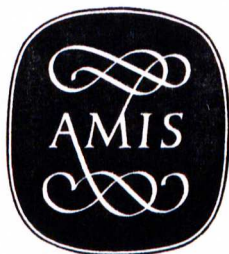


**American  
Musical Instrument Society**



**22nd Annual International Meeting**

12-16 May 1993

Crowne Plaza Hotel

Nashville, Tennessee

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AMERICAN MUSICAL INSTRUMENT SOCIETY  
22nd Annual International Meeting  
12-16 May 1993

Crowne Plaza Hotel: Nashville, Tennessee

WEDNESDAY AFTERNOON, MAY 12

2:00-9:00     **Registration** - Legislative Terrace.  
Chairman: Gerald L. Moore, Nashville, TN

3:00-6:00     **Board Meeting** - Suite 7-A

8:00           **Opening Session** - Davidson Room.  
Chairman: Robert E. Eliason, Lyme, NH.

Welcome - AMIS President, Phillip T. Young, Victoria, BC,  
Canada.

Introduction to Nashville - Peggy F. Baird, Huntsville, AL.

Dealers and Collectors Exhibits -

Tony Bingham, London. Old musical instruments and  
reference books.

David and Nina Shorey, Bowdoinham, ME. 18th- and 19th-  
century flutes.

**Continuing Activities**

Silent auction, Capitol Ballroom, before and between sessions  
until 10:55 Friday morning.

Throughout the week, May 12-15 at noon Craig Duncan and  
guests will be performing in the food court of the mall at the  
Church Street Center. Mr. Duncan is a highly respected  
musician, recording artist, producer, arranger, and writer of  
several books on various styles and traditions of music. He plays  
many instruments, but is expected to play hammered dulcimer  
and violin (he is a prize-winning fiddler).

## THURSDAY MORNING, MAY 13

8:30-12:15 **Registration** Foyer of Ballroom I

9:00-10:30 **Session I - History, Iconography & Ethnomusicology**  
Ballroom I. Chairman: Cecil Adkins, University of North  
Texas, Denton.

Sam Quigley, Museum of Fine Arts, Boston. "Significant  
Javanese Gamelans in American: A Comparative View." 11\*

Dixie Harvey, Freed-Hardeman University, Henderson, TN.  
"Panharmonicon Pandemonium, or the Rage over the lost  
Mechanical Orchestras." 12

Kenneth Kreitner, Memphis State University. "Musical  
Iconography in the Works of Dr. Seuss." 13

10:30-11:00 **Coffee/Tea Break**

11:00-12:30 **Session II - Winds 1** Ballroom I.  
Chairman: William E. Hetrick, Hofstra University,  
Hempstead, NY

Laura Danae Stanfield, University of Illinois, Urbana-  
Champaign. "The Harmonica in America." 14

Herbert Heyde, Germany. "The Berliner Pumpen Valve  
before the Invention of the Bass Tuba by Wieprecht and  
Moritz in 1835." 15

Kermit Welch, Rolling Hills, CA. "Conical Bore Soprano  
Woodwinds of the Late Nineteenth and Twentieth  
Centuries." 16

\* Abstracts of papers and biographical sketches of speakers  
are found on the page indicated after each session entry.



**THURSDAY AFTERNOON, MAY 13**

12:30           **Annual Business Meeting and Luncheon** - Location to be announced.  
Announcement of Bessaraboff Prize and Curt Sachs Award.  
Introduction of new members of the Board of Governors.

3:00-4:30       **Session III - Show and Tell** Ballroom I.  
Chairman: Roger Widder, Fayetteville, AR.

8:00            **Concert** - Ballroom I.  
Multi-Keyboard Lecture Recital by George Lucktenberg,  
Clayton State College, Morrow, GA

This concert is sponsored, in part, by Marlowe A. Sigal in honor of AMIS President, Phillip T. Young.

The Steinway piano used in this concert and in other sessions throughout these meetings is provided by Glen Gough of American Keyboard Gallery, Antioch, TN.

**FRIDAY MORNING, MAY 14**

7:45-8:45 **Editorial Board Meeting** - Speakers Restaurant, Crowne Plaza Hotel.

By appt. **Registration** - Chairman: Gerald L. Moore, Nashville, TN

9:00-10:30 **Session IV - Keyboards 1** Ballroom I.  
Chairman: Martha Novak Clinkscale, University of California, Riverside.

Benjamin Vogel, Lund, Sweden. "Tangent Pianos in Poland." 17

André P. Larson, Shrine to Music Museum, Vermillion, SD.  
"The Swiss House Organs of Josef Looßer." 18

Ann Viles, Memphis State University. "The Player Piano Industry in Memphis." 19

10:30-11:00 **Coffee/Tea Break**

10:55 **Silent Auction ends**

11:00-12:30 **Session V - Winds 2** Ballroom I.  
Chairman: Albert R. Rice, Claremont, CA.

Virginia Schulze-Johnson, Madison, NJ. "Theobald Boehm and the Evolutionary Steps to the 1847 Flute." 20

Allan Comstock, Memphis State University. "The Use of the Bajón in the Cathedral of Palencia in the 15th and 16th Centuries." 21

J. Robert Moore, University of Oregon, Eugene. "The Tárogató, Hungarian National Woodwind Instrument, Past and Present." 22

## FRIDAY AFTERNOON, MAY 14

12:15-5:00 **NASHVILLE BUS TOUR**

12:45-2:15 Lunch on your own at the Opryland Hotel  
Tour the indoor gardens.  
See the Gibson guitar exhibits.

2:30-4:15 Visit the Roy Acuff collection at Opryland. Tour guides are  
Walter Carter and/or George Gruhn of Gruhn Guitars, Inc.,  
Nashville, TN.

Tour the other Grand Ole Opry museums.

5:00 Arrive back at the Crowne Plaza Hotel.

## FRIDAY EVENING, MAY 14

### SUGGESTED ACTIVITIES

Attend the Grand Ole Opry

Attend the Nashville Symphony concert at the Tennessee  
Performing Arts Center. (Program: Beethoven Ninth  
Symphony and Britten Requiem.)

Swim in the Crowne Plaza indoor pool; work out in the spa

Shop in the Church Street Center.

Explore the Tennessee State Capitol and Plaza.

Visit the Davis-Kidd Bookstore and Second Story Cafe.

Dine at one of the special Nashville restaurants  
or supper clubs.

Ride the Broadway Dinner Train.

**SATURDAY MORNING, MAY 15**

9:00-10:00 **Session VI - Bowed Keyboards** Ballroom I.  
Chairman: André P. Larson, Shrine to Music Museum,  
Vermillion, SD.

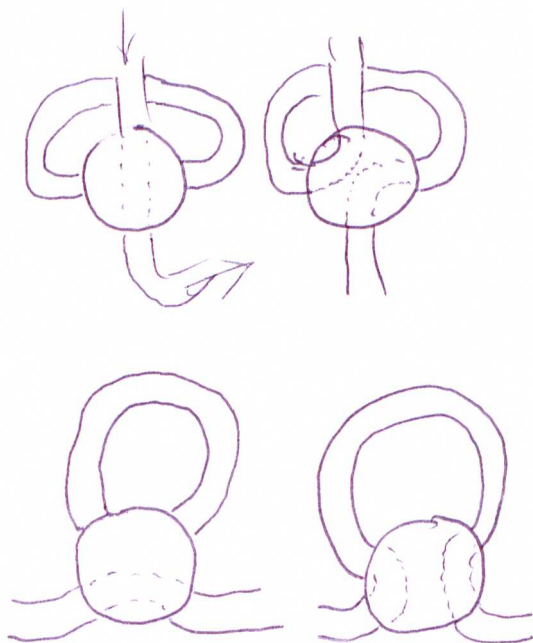
Carolyn W. Simons, Cedarville College, Cedarville, OH.  
"Some 19th Century Mechanically Bowed Keyboard  
Instruments in European Museums." 23

Akio Obuchi, Fuchu, Tokyo, Japan. "Making a Bowed  
Keyboard Instrument." 24

10:00-11:00 **Break** (time required for choir to set up)

11:00-12:15 **Concert** Ballroom I.  
Alabama A & M University Concert Choir, Huntsville, AL.  
Richard Tucker, conductor. Joel Jones, accompanist.

Performance sponsored by Flanagan Lumber Company,  
Athens, AL.



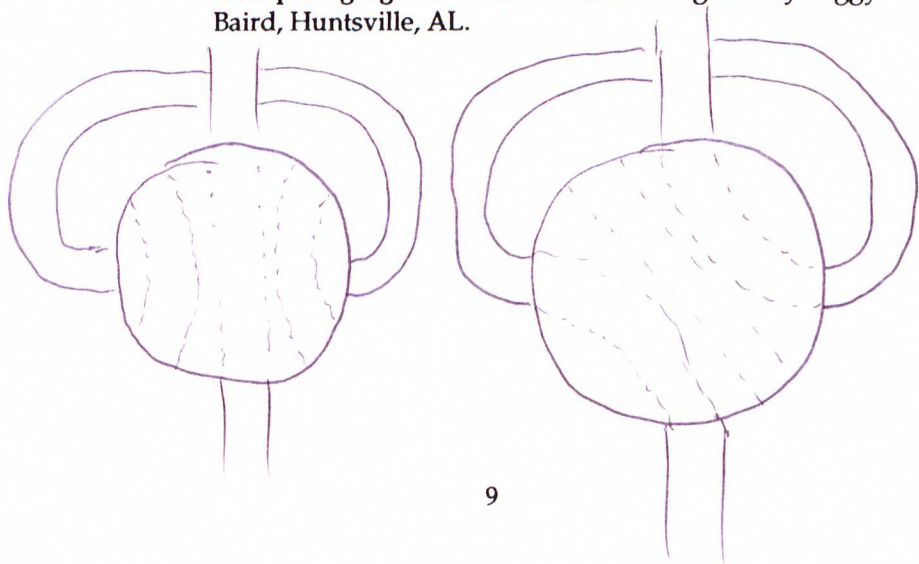
**SATURDAY AFTERNOON, MAY 15**

- 12:30      **Lunch** (on your own)
- 1:45-5:45      **NASHVILLE BUS TOUR**
- 2:15-3:30      Visit the Carillon and Recording Studio at Belmont University. Beverly Buchanan, carillonneur.
- 3:45-5:30      Visit the Blair School of Music at Vanderbilt University for a Faculty Recital, Reception, and tour of the Music Library.
- 5:45              Arrive back at the Crowne Plaza Hotel.
- 6:30-7:00      **Cocktail Party** Legislative Terrace (cash bar).
- 7:00              **Banquet** Ballroom I.  
Wine courtesy of George Gruhn Guitars, Inc., Nashville, TN.

**Curt Sachs Award recipient address** Jeannine Lambrechts-Douillez, Curator Emeritus of the Archaeological Museums of the City of Antwerp, Belgium.

**Live Auction** Auctioneer: Laury Libin, Metropolitan Museum of Art, New York City.

**Group Singing** Favorite Tennessee songs led by Peggy Baird, Huntsville, AL.





**SUNDAY MORNING, MAY 16**

9:00-10:30 **Session VII - Strings** Davidson Room.  
Chairman: Frederick R. Selch, New York, NY.

Stephen L. Grauberger, University of Hawaii at Manoa.  
"Regional Diversity in the Diatonic Harp of the Philippines:  
Ilocano vs. Visayan Harp." 25

Hal Rammel, Cedarburg, WI. "The Devil's Fiddle: Past and  
Present." 26

Margaret Downie Banks, Shrine to Music Museum,  
Vermillion, SD. "Conn's Wonder Violin." 27

10:30-11:00 **Mini-Brunch** Legislative Terrace.

11:00-12:30 **Session VIII - Keyboards 2** Davidson Room  
Chairman: Laurence Libin, Metropolitan Museum of Art,  
New York, NY.

Jane L. Johnson, Crab Orchard, TN. "Renaissance Sources of  
Portuguese and Spanish Historic Principal and Reed Organ  
Stops." 28

John Koster, Shrine to Music Museum, Vermillion, SD. "The  
Development of the Divided Bridge and Rational Strike  
Point in Early English Pianos: Contemporary Theoretical  
Sources." 29

Edward Kottick, University of Iowa, Iowa City. "Bridges,  
Bentsides and Nuts: Some Non-Standard Harpsichords." 30

## Abstracts of Papers and Programs

### **Significant Javanese Gamelans in American: A Comparative View.** Sam Quigley, Museum of Fine Arts, Boston

Gamelan was first heard in North America in May 1893 at the World's Columbian Exposition in Chicago. Taking this centennial anniversary as a point of departure, discussion will focus on several ensembles along with issues of date attribution and provenance. The oldest gamelans—at the Field Museum, Chicago and the Museum of Fine Arts, Boston—will be compared to others in the United States and a few royal ensembles in Java. The presentation will be illustrated with slides, with attention given to case construction and decoration, instrumentation and tuning.

Sam Quigley has been an avid student of Javanese gamelan since 1972. He holds a B.A. and an M.A. from Wesleyan University and is currently the Keeper of musical instruments at the Museum of Fine Arts, Boston, where he has worked since 1980. His inclination toward ethnomusicology has resulted in increased study of non-Western instruments at the Museum, and in 1990, led to the acquisition of an important nineteenth-century gamelan.

## **Panharmonicon Pandemonium, or the Rage over the lost Mechanical Orchestras.**

Dixie Harvey, Freed-Hardeman University, Henderson, TN

Although the history of mechanical marvels may be traced far back into human history, the ingenious, mechanical devices of the eighteenth and nineteenth centuries are largely unsurpassed, even today. Among the great inventors of such automata was Johann Nepomuk Maelzel, from Regensburg, Bavaria. His father, an inventor as well as an organ builder, trained his son in the same trades. In 1792 young Maelzel moved to Vienna where he began to teach music. He soon set up a workshop in a piano factory and began to concentrate his energies on musical mechanisms such as a sort of mechanical orchestra known as the Panharmonicon. It was also during this time that he met the composer Ludwig van Beethoven for whom he constructed several ear trumpets.

Maelzel and Beethoven collaborated on several projects, including a symphony for the Panharmonicon and a type of device which would keep musical time, a chronometer. In 1815 Maelzel met the Dutch inventor Winkel, who showed him his device for keeping time. Maelzel took Winkel's invention and marketed it as his own in Paris. He wrote an endorsement for the metronome in French and I have translated it into English for the first time for this paper; a copy of the Notice will be given to everyone attending this lecture.

Maelzel was also an amateur composer and a piece of his for piano found at the Albertina music library in Vienna will be performed. Maelzel worked at Schönbrunn palace as court engineer for awhile, but later sought his fortune in New York City. He exhibited an automatic trumpeter and other mechanical oddities in the New World for about ten years. A trip to Havana, Cuba, proved fatal—on the return voyage he was found dead in his berth and was given burial at sea off the coast of Charleston, South Carolina leaving the world without a trace; much the same fate was accorded his musical inventions. Only the metronome remains today—improved by Maelzel, but actually the invention of another.

Dixie Harvey. B.A. and M.M in Piano Performance, Indiana University; Ph. D. in Musicology, University of North Texas. Extensive teaching and performing career. Her unique book about Johann Nepomuk Maelzel is soon to be published.



## Musical Iconography in the Works of Dr. Seuss

Kenneth Kreitner, Memphis State University, Memphis, TN

The cartoons and children's books of Dr. Seuss (Theodor Seuss Geisel, 1904-1991) include several hundred pictures of singers and especially musical instruments. Some are straightforward illustrations; most, more familiarly, represent feats of remarkable fancy—instruments enlarged or distorted almost but not quite beyond recognition, novel objects and parts of the body used as instruments, instruments functioning as components of imaginary nonmusical machines.

This paper will look at the pictures from two directions paralleling the more conventional use of pictorial evidence to explore questions of instrumentation and organological detail in medieval and renaissance music. The patterns of instrumentation shown in his many pictures of bands and large celebrations help to illuminate the cultural grooves, subtle but ancient and powerful, that past and present real instrumentations have travelled; and similarly, the patterns of precision and distortion in his individual drawings show much about how our culture at large perceives real instruments—the boundaries of what we are willing to consider a musical instrument, the aspects of (for example) a trumpet that are necessary to identify it as such, the other features that are subject to artistic and playful alteration, and so forth. And these observations can then be turned back onto the problems of medieval and renaissance iconography, whose sources at their best are still subject to the same cultural pressures and, indeed, often show evidence of similarly deliberate distortion for humorous or horrifying effect.

Dr. Seuss's books may seem far removed from the literal realities of musical life in the twentieth century. But his images have endured with curious power: the books even forty and fifty years old have aged remarkably well, and they have left a deep impression on several generations. The pictures of musical instruments and singers, in particular, tell much about the place of music and its hardware not only in the mind of Dr. Seuss himself, but in the collective minds of us, his readers.

**Kenneth Kreitner** is Assistant Professor of music history at Memphis State University. He holds a Ph.D. from Duke University, and is the author of *Discoursing Sweet Music: Town Bands and Community Life in Turn-of-the-Century Pennsylvania* (University of Illinois Press, 1990), *Robert Ward: A Bio-Bibliography* (Greenwood Press, 1989), and various articles on music in the renaissance and in 19th-century America. He is a founder and leader of the Memphis Consortium for Early Music.

## **The Harmonica in American Music**

Laura Danae Stanfield, University of Illinois, Urbana-Champaign, IL

The harmonica was considered a semi-legitimate novelty instrument after its invention in the 1820s, but by the time it was first brought to the fore on American "race" recordings it had lost some of its popular currency. This instrument has played an essential role in the American blues tradition and is frequently found in both blues-derived popular music and in jazz.

Two major types of harmonica, the diatonic and the chromatic, have been prevalent in the United States. The chromatic version was brought into prominence in the late 1930s by American players and new compositions by classical composers. As a result of the successes of such classically-oriented virtuosi as Larry Adler, Tommy Reilly, and John Sebastian the harmonica has grown in musical stature while still remaining a vital part of folk music, country blues, and jazz.

This presentation will focus on the state of research on the harmonica, the instrument's development in the United States, and the various musical traditions in which it can be currently found in America.

Laura D. Stanfield is a doctoral student in Musicology at the University of Illinois at Urbana-Champaign. Her dissertation concerns the two earliest ballets of Aaron Copland, and other areas of research include Native American music, dance history, and American musical instruments. Her education includes degrees in Music and Foreign Languages from Yale University, an M.M. in Choral Music from Illinois, and she is currently completing a Master of Library Science at Illinois while teaching a music history survey class. Miss Stanfield is a student of Nicholas Temperley and Bruno Nettl, and is employed as an assistant reference librarian at the Music Library at Illinois.



## **The Berlin Pumpen Valve before the Invention of the Bass Tuba by Wieprecht and Moritz in 1835**

Herbert Heyde, Germany (currently working at the Shrine to Music Museum, Vermillion, SD)

For some time it has been known that Wieprecht was not the actual inventor of the valves known as Berliner Pumpen used on his Bass Tuba of 1835. Rather, he modified an older valve type, but it has not been ascertained so far exactly how the precursor looked. A bass tuba in the Shrine to Music Museum, Vermillion, has obviously preserved the anticipating version and will be the subject of this paper. Details about when and where this unsigned tuba was built will also be discussed.

**Herbert Heyde.** Born in 1940 in Saxony (Germany); 1964-1973, Curator at the Musical Instrument Museum in Leipzig; 1974 to date, free lance work in Germany and, since 1992, in the United States. He has worked most recently at the Trumpet Museum in Pottstown, Pennsylvania and at the Shrine to Music Museum in Vermillion, South Dakota.

## **Conical Bore Soprano Woodwinds of the Late Nineteenth and Twentieth Centuries**

Kermit Welch, Rolling Hills, CA

The purpose of this presentation is to contrast conical bore woodwinds of the late nineteenth century and the twentieth century with the cylindrical bore clarinet. Instruments demonstrated in addition to the clarinet will be soprano saxophone, tarragato, octavin, and sax-fingered oboe. The presentation will deal with the similarities and differences of the size of bore, configuration, mouthpiece construction and their effect on tone.

**Kermit Welch** has a BA in music and education from Arkansas Polytechnic University and an MA from Pepperdine University in California. For the past thirty-six years he has taught elementary school and instrumental music in the Palos Verdes Peninsula School District in California. He also performs professionally as a jazz musician, teaches woodwind students privately, and performs chamber music with the Denner Clarinet Quartette which he founded. Collecting musical instruments has been an avid hobby since early teaching days. He has approximately 300 woodwind instruments which he uses in teaching and performance.

## Tangent Pianos in Poland

Benjamin Vogel, Lund, Sweden

The tangent action was one of the options applied to the piano in the eighteenth century, the first century of its development. The name was derived from the similarity of its mechanism to that of the clavichord whose string is struck by a metal blade, or tangent, mounted vertically on the key lever. On the piano the tangent was actually a hammer that struck the string from a suspended vertical position above the key lever. Heretofore there has been no mention in organological literature of the use of this kind of action in Poland, nor is there mention about the use of this kind of action in the square piano. The existence of square pianos with tangent actions outside of Poland is unknown to this author. There is good evidence of the construction of tangent piano actions by Polish piano makers, as well as evidence of the practical application of this action to the square piano, though probably only in this country. We will consider two instruments from the last quarter of the 18th century owned by the Muzeum Diecezjalne (Diocesan Museum) in Sandomierz and Muzeum Narodowe (National Gallery) in Cracow. The first is most likely of Polish origin, but the origin of the second is unknown.

Benjamin Vogel graduated from the University of Warsaw in 1977 having completed his doctorate in musicology. His dissertation was on the musical instrument industry in the kingdom of Poland between 1815 and 1918. Since that time he has specialized in the study of pianos. He guided the program in musicology at the University of Warsaw branch in Bydgoszcz for several years and is now living in Lund, Sweden.

## **The Swiss House Organs of Josef Looßer**

André P. Larson, Shrine to Music Museum, Vermillion, SD

Although providing only a footnote to the history of European organ building, the house organs built in the Toggenburger valley of Switzerland during the second half of the 18th century by Josef Looßer (1749-1822) and his contemporaries represent a fascinating local tradition. Most of the surviving instruments remain in Switzerland, but an example acquired by The Shrine to Music Museum in 1990 presents an opportunity for closer study. Built by Josef Looßer in 1786, it has six stops (the largest organ by Looßer known to survive) and is painted in the traditional Toggenburger style.

**André P. Larson** is Professor of Music and Director of The Shrine to Music Museum & Center for Study of the History of Musical Instruments at the University of South Dakota in Vermillion. He is a past-president of AMIS and was the 1990 recipient of the Curt Sachs Award.



## The Player Piano Industry in Memphis

Ann Viles, Memphis State University, Memphis, TN

Player pianos were manufactured in Memphis from 1951 to 1985. Winter & Co. bought Ivers & Pond Piano Co. in 1951 and became Aeolian Corporation in 1965. Aeolian was one of the few player piano manufacturers to survive the collapse of the industry during the 1930s and began to bring back the players in 1956. The company's corporate headquarters was moved to Memphis in 1971, and the Memphis plant reached a capacity of 200 pianos a day. Aeolian Player University began offering a five-day training program for piano technicians in 1972. By the late 1970s, Aeolian dominated the market, selling about 10,000 players each year, all of which were produced in Memphis. The company began having financial difficulties in 1980. It was purchased by Peter Perez, formerly of Steinway & Sons, in 1983 and was forced into bankruptcy in August, 1985 after being sued by several of its suppliers.

Ann Viles, currently Associate Professor and Head of the Music Library at Memphis State University, has previously worked as Music Librarian at the University of Tennessee and The Curtis Institute of Music. She received the Ph.D. in Musicology from Bryn Mawr College and also holds degrees in musicology, library science, and music performance from the University of Tennessee and the University of North Carolina, Chapel Hill. She was editor of the *Journal of the Viola da Gamba Society of America* from 1985 until 1992.



## **Theobald Boehm and the Evolutionary Steps to the 1847 Flute** Virginia Schulze-Johnson, Madison, NJ

Theobald Boehm (1794-1881) invented the 1832 ring-keyed flute and the 1847 cylindrical flute in response to a need for a flute with an equal temperament tuned chromatic scale. Boehm's inspiration for these inventions came from hearing the London virtuoso and innovator, Charles Nicholson, perform on his large-holed flute. Seeing the enlarged holes of Nicholson's flute made Boehm aware of the fact that the flute required an acoustical approach for solving the problems of tuning. The invention of the 1832 ring-keyed flute was a beginning for solving these problems; first by making the tone holes as large as possible, and placing them in the correct acoustical positions, and second, by providing a new fingering and key system. The 1847 invention completed the design of a new instrument by changing the bore from conical to cylindrical, by adding the parabolic taper at the upper end and by using metal instead of wood. The genius of the invention was Boehm's ability to put together known concepts and his own ideas innovatively.

**Virginia Schulze-Johnson** has B.M and M.M degrees in flute performance from the New England Conservatory of Music, and a Ph. D. in performance from New York University. Her faculty positions include: Affiliated Artist at Drew University, Madison, NJ; Delbarton School, Morristown, NJ; and Silver Reeds Studio, Madison, NJ. She is the AMIS New York Flute Club, and a member of the Delbarton Baroque Ensemble.

## The Use of the *Bajón* in the Cathedral of Palencia in the 15th and 16th Centuries

Allan Comstock, Memphis State University, Memphis, TN

This paper examines the musical life and liturgical function of the *bajón* in the cathedral at Palencia, Spain, in the late Renaissance and early Baroque periods, specifically between 1553 and 1700.

As the first instrument after the organ to be incorporated into the liturgical service on a regular basis, the *bajón* (probably the bass dulcian) served an unusually important and diverse role. Among its functions were its use as the supportive bass of a cappella sacred polyphony and as a core member of the "ministriles" at Palencia (a wind band which also included cornett, sackbut, and shawm). The importance of the *bajón* to the musical establishment at Palencia is further illustrated by the number of players. By 1563 the Cathedral had in its employ 3 *bajónistas*, a number which remained relatively constant into the 18th century.

The office of *bajónista* was created in 1553, and its history may be divided into two periods. For the first fifteen years it was the only instrumental position at the Cathedral other than that of organist. It is likely that the position was created to help support the choir, serving much the same function as a *basso seguente* (a practice that survived in Spanish cathedrals until the early 20th century). To help with the demands of the position two additional *bajónistas* were hired in the early 1560s. Other instrumentalists appear on the Palencia payroll beginning in 1568, engaged for the purpose of forming a band of wind players. Presumably one of the *bajónistas* performed with the band while the other two retained their choir duties.

To help clarify the dual role of the *bajónista* at Palencia this paper also explores the Cathedral repertory and the position of the *bajón* therein. Probing the music itself provides invaluable technical insights into the use of the instrument that help to bridge gaps in the written record.

Allan Comstock received his Bachelor of Music degree from the Eastman School of Music, a Master of Arts degree from Western Illinois University, and is currently pursuing his DMA at Memphis State University concentrating in bassoon performance, early double reed instruments and musicology. This paper forms the nucleus of his doctoral lecture recital.

## The Tárogató, Hungarian National Woodwind Instrument, Past and Present

J. Robert Moore, University of Oregon, Eugene

The Tárogató in its earliest form is an ancient double-reed instrument associated with the Hungarian wars of independence, from the early 18th century. It was used in Hungarian warfare as a military signal instrument. It so riled Hungarian patriots that it was banned—and burned—by the Hapsburgs.

During a late 19th century surge of Hungarian nationalism, it was determined that the Tárogató would be renovated and "refined." The process was entrusted to J.V. Schunda, prominent Budapest instrument manufacturer.

Schunda enlarged the bore, replaced the double reed with a single-reed mouthpiece, and added keywork. The instrument in this form is essentially a wooden saxophone.

During June and July of 1991 I was in Hungary researching the Schunda Tárogató, interviewing folk dancers, musicians, instrument makers and repair people, and photographing instrument collections in several cities, including Budapest, Keszecemet, Debrecen, Nyiregyhaza, and Szekesfehervar. I purchased an instrument (made by Stowasser) and studied Tárogató with Csaba Nagy, who has made solo recordings on the Hungaroton Label.

This lecture/demonstration consists of my findings on the current state of the Tárogató, and a demonstration of music played by the instrument, including some folk music, some contemporary compositions, and the solo from the third act of "Tristan," which was played on Tárogató rather than English horn at the suggestion of Gustav Mahler during his reign as Music Director of the Hungarian National Opera (1888-1891). Selected photographs and recordings will be used.

**J. Robert Moore.** Associate Professor of Music, University of Oregon, Eugene; teaches oboe and saxophone. DMA, Eastman School of Music. Recitalist, chamber and orchestral musician with extensive performance credits in this country and abroad. During the summer of 1991, Moore received a research grant from the Office of Research and Sponsored Programs of the University of Oregon to do research on the Hungarian tárogató in Budapest.



## Some 19th Century Mechanically Bowed Keyboard Instruments in European Museums

Carolyn W. Simons, Cedarville College, Cedarville, OH

The concept of mechanically bowed keyboard instruments did not end with the 16th century Geigenwerk. Hans Haiden was merely the first of a long line of inventors who attempted to combine keyboards with a bowing device. Some examples from the 19th and 20th centuries are found in a handful of museums in Europe: an anonymous *streichklavier* in the German National Museum in Nuremberg, several *Piano-quators* by G. Baudet in museums in Munich, Stuttgart, and Leipzig, and a *streichklavier* by Hofman and Czerny in the Vienna Technical Museum.

With the help of slides I took on location and information gained from a close examination and discussion with curators, I propose to introduce these unusual instruments and explain how they produced their sound.

Carolyn W. Simons is completing her doctorate in musicology with Prof. Ed Kottick at the University of Iowa. During 1992-1993 she lived in Nuremberg, Germany on a Fulbright grant for dissertation research. She currently teaches at Cedarville College, Cedarville, OH.

## Making a Bowed Keyboard Instrument

Akio Obuchi, Fucho Tokyo, Japan

The bowed keyboard instrument is an unusual musical instrument. Some examples of this type of instrument can be found in the research done on early 17th century musical instruments. Over the years, a number of instrument makers have tried to make this very interesting instrument; however, as no functioning examples have been preserved, it is not known if any successful instruments were ever made. To determine if such an instrument could be built to produce quality sound or if problems intrinsic to the design of such an instrument would prevent this, an instrument was designed and constructed.

Unlike the harpsichord and clavichord, a bowed keyboard instrument can sustain the tone as long as the friction wheel is rotating. By changing the rotation speed of the friction wheel and/or pressure between the string and friction wheel, dynamic expressions can possibly be produced. One unique possibility of this instrument should be pointed out: by controlling the string tension, resonant frequencies of the strings can be finely adjusted high and low. This fine control of string tension is made possible by a pull-down mechanism used in this recently built instrument. Together with the long-tone sustaining effect, this provides pure harmonics of 3rd, 4th, 5th as needed even if originally not tuned so.

In this paper, the historical background of the bowed keyboard instrument is first reviewed, and then the design and performance of the recently built bowed keyboard instrument is described in detail.

Akio Obuchi is an engineer, specializing in acoustical measurements for oil well evaluation services. He is currently a department head of a Schlumberger engineering center in Tokyo. From 1971 until assuming his current position in 1982, he was a research engineer for Pioneer electronics in Tokyo. He started harpsichord making in 1969 and completed several different styles of historical harpsichords and virginals, including Italian, French, and Flemish. He also loves to play baroque violin. He holds B.S. and M.S. degrees in mechanical engineering, both from Nihon University in Tokyo.



## **Regional Diversity in the Diatonic Harp of the Philippines: Ilocano vs. Visayan Harp**

Stephen L. Grauberger, University of Hawaii at Manoa

The Filipino harp is a centuries-old, acculturated, musical instrument of European descent which is now quite rare. Very little published material is available anywhere on this subject, including the Philippines. Once described as the "Instrumento Nacional" by 19th century Filipino chroniclers, few Filipinos or outsiders now realize its active existence.

The Filipino harp is related to Late Renaissance/Baroque Hispanic harp models brought first to the New World and transferred via Galleon trade between Acapulco, Mexico and the Philippines.

Primary organological thesis research, especially on the Visayan harp, done over a one year span (8/91-8/92) has revealed interesting comparisons on a number of harps studied. The paper to be presented will describe and graphically illustrate differences between two regional harp models from linguistic and distinct geographical areas. Brief comparisons will be made to early Spanish and contemporary Latin American harp examples available through secondary sources. Playing techniques will be discussed and recordings presented.

**Stephen L. Grauberger** is originally from Colorado and has lived in Hawaii for the past 14 years. He is presently doing thesis work as a Master of Arts candidate in ethnomusicology at the University of Hawaii. As a student Fulbright Scholar from August of 1991 to August of 1992 he did research on the Visayan harp of the Central Philippines, primarily on the island of Cebu. During his stay there he also made a brief comparative study of the Hispanic diatonic harp of another linguistically distinct group, the Ilocanos of Northern Luzon, Philippines.

**The Devil's Fiddle: Past and Present**  
Hal Rammel, Cedarburg, WI

The devil's fiddle is a one-string percussion instrument more commonly known in Europe and England as the *bumbass* (German) or *bladder and string* (England). In the United States, devil's fiddle is probably a more familiar name, but this too has origins in the German *Teufelsgeige*, devil's violin. The bumbass is basically a stick zither, consisting of a vertically held pole four to six feet long, sometimes with a small pair of cymbals fixed to the top. A string stretches the length of the pole across a resonator (animal bladder, gourd, small drum, wooden box, or metal canister) mounted to the pole near the bottom end. The string is bowed with a notched stick to create a drum roll effect and the pole hit against the ground to sound the cymbals, bells and other noisemakers that may be fastened to the pole.

This paper is a survey of information available on the development, history and use of the devil's fiddle.

**Hal Rammel** is a composer/instrumentalist, instrument builder, archivist of unusual acoustic instruments, and author. He is a frequent contributor to the journal *Experimental Musical Instruments*. He lectures and conducts workshops in Chicago for the Experimental Sound Studio and the Sound Department of the School of the Art Institute on musical instrument invention and sound exploration. His full-length folklore study *Nowhere in America: The Big Rock Candy Mountain and Other Comic Utopias* was published by the University of Illinois Press in 1990. "The Devil's Fiddle: Past and Present" was originally published in *Experimental Musical Instruments*.

## Conn's Wonder Violin

Margaret Downie Banks, Shrine to Music Museum, Vermillion, SD

Although most people today associate the Conn Company of Elkhart, Indiana, with the manufacture of brass instruments—and particularly with their emphasis on student models—few are aware that at the turn of the century Conn produced all lines of musical instruments for the professional as well as the amateur musician. Neither are many people aware of the fact that Conn both produced and imported bowed and plucked stringed instruments and, in particular, violins, for some thirty years between about 1897 and 1927.

Under the watchful eye of Brooklyn violin maker, William V. Pezzoni, Conn's "horn factory" in Elkhart produced about 2,500 violins during those thirty years, using century-old, seasoned wood from a condemned building in New York City, cut by a machine of Conn's own invention, and finished by skilled craftsmen such as Frank Barstow, a pupil of George Gemunder. Two patents emerged from Conn's violin department, including one for a unique "chromatic sounding beam" intended to improve the tone quality of "even a cheap violin."

Conn's adventure in the violin trade also included the sale of "celebrated second-hand violins," including some purportedly made by Nicolas Gagliano, Andrea Amati, and Joseph Guarnerius.

This slide presentation will recount the almost forgotten history of Conn's violin production and the marketing of the "Wonder" violin, described in advertising as simply "the best violin on earth."

**Margaret Downie Banks** is Curator of Musical Instruments and Professor of Museum Science at The Shrine to Music Museum, Vermillion, SD. She has a Ph. D. in musicology from West Virginia University, Morgantown. Dr. Banks, whose research interests range from 19th and 20th century American musical instruments and their manufacturers to early bowed stringed instruments such as the rebec, pochette, and violino piccolo, has lectured extensively throughout the United States, Canada, and Europe; has authored numerous articles about musical instruments; and is currently writing a book about the history of the **C.G. Conn Musical Instrument Manufacturing Company of Elkhart, Indiana**. She is the Vice-President and Membership Registrar of the American Musical Instrument Society.



## Renaissance Sources of Portuguese and Spanish Historic Principal and Reed Organ Stops

Jane L. Johnson, Crab Orchard, TN

The "gentle, dark sound" of Principal stops of historic Iberian organs is a Renaissance sound, found in old Italian *Principali* stops and the organ at Rysum, Germany (original Principal pipes dated 1457). Most German Renaissance Principals were made louder to support congregational singing after the Reformation.

A Spanish organ contract of 1545 described, ". . . trumpets in the German style with their voices as strong as any in all Germany." These words describe the Iberian *Trompeta Real*, an internal, vertical trumpet with an intense Renaissance sound, found also in trumpets of the organ at Uttum, Germany (original pipes, 1656), and the Schlägl Monastery organ, Austria (seventeenth century). Praetorius pictured this type of trumpet with its distinctive pointed reed (Plate XXXVIII), in his *Theatrum Instrumentorum* (published in Germany, 1620).

The Spanish Basque organ builder Joseph Echevarria claimed the invention of *en chamade* reeds in 1659, "placed in the cornice [of the organ] like cannons." The internal and vertical *Trompeta Real* continued in use along with *enchamade* reeds. By placing trumpet pipes *en chamade* without a boot to control air flow, (unlike the *Trompeta Real*) the already intense Renaissance sound was magnified.

Seventeenth century German reed construction changed the intense sounding Renaissance reeds to differently constructed reeds with a sound emphasizing the fundamental, a sound better suited to Baroque polyphonic music of Northern Europe. Consequently, Schnitger and Silbermann Baroque trumpets have a different sound than the intense Iberian Renaissance trumpets and their derivatives, used from the sixteenth through the late nineteenth centuries.

Jane L. Johnson's "An Interview With Luis A. Esteves Pereira" was published in the April, 1993 issue of *The American Organist*. Her article, "Organ, Portugal, Historical Survey (1562-1807)" along with some brief articles concerning the harpsichord will appear in the *Encyclopedia of Keyboard Instruments, Vol. I, The Organ* to be published by Garland Publications, Inc. In 1991 as part of the Eugene A. Anderson Organ Series, she gave a concert of Portuguese and Spanish organ music on the Brombaugh Renaissance tracker organ (Opus 27, mean-tone tuning) at Southern College, Collegedale, TN. She is also a composer and a published and popular caricaturist.



## The Development of the Divided Bridge and Rational Strike Point in Early English Pianos: Contemporary Theoretical Sources

John Koster, Shrine to Music Museum, Vermillion, SD

An unpublished manuscript written in the 1790s by John Dovaston (1740-1808), an amateur scientist and musician, is a unique contemporary source for the theory behind John Broadwood's development, about 1788, of the grand piano bridge divided into separate bass and treble sections, by which means the brass bass strings and steel treble strings are given different scalings appropriate to the characteristics of the two materials. Standard histories of the piano repeat a statement of A.J. Hipkins (1826-1903) that a primary reason for the divided bridge was the adoption of "an approximately rational striking place" of one-ninth the string length, by which a dissonant overtone might be suppressed. However, such a consistent strike ratio is (as noted in a recent paper by R.S. Winter) not typical of Broadwood pianos.

It is unlikely that a "rational" strike place could have been adopted as early as 1788: that the activation of a string at the node of an overtone suppresses it was published as novel by Thomas Young in 1800. Dovaston's account does not mention strike points. Rather, the even tone and increased stability resulting from rational scaling are discussed. Tiberius Cavallo, a scientist said to have advised Broadwood, likewise emphasizes in his *Elements of Natural or Experimental Philosophy* (London, 1803) the care that piano makers should exercise in determining string lengths for an even tone.

It is possible that, after Young's discovery in 1800, Broadwood briefly experimented with a rational strike point. An approximate one-ninth ratio is found in a Broadwood piano of 1804.

**John Koster** is Conservator and Associate Professor of Museum Science at the Shrine to Music Museum, Vermillion, SD. Previously, he was active for many years as a keyboard instrument maker and restorer in the Boston area. Koster is a graduate of Harvard College with the A.B. degree cum laude in music. His studies cover the field of early keyboard instruments, from Italian harpsichords and Flemish virginals to nineteenth-century pianos and organs. He has presented numerous papers in this country and abroad, and has published many articles in scholarly musical instrument journals. His comprehensive catalogue of keyboard instruments at the Museum of Fine Arts in Boston is forthcoming. A recent project at the Shrine to Music Museum has been the restoration of a grand piano by Manuel Antunes, Lisbon, 1767, one of the earliest extant grand pianos and one of the best preserved.

## Bridges, Bentsides and Nuts: Some Non-Standard Harpsichords

Edward L. Kottick, University of Iowa, Iowa City

Most clavicitheria (upright harpsichords) are shaped like harpsichords that have been bent 90 degrees where the keyboard joins the case. Bentside and spine appear in their usual positions, although vertically oriented. But there are a small number of pyramid-shaped clavicitheria —upright instruments that are symmetrical, with a bentside on the left as well as the right. Like pyramid pianos, most of these have one normal 8' bridge on the soundboard in the usual position, and the strings simply angle from the bottom left toward the upper right. However, a few pyramid clavicitheria have two bridges, each following its bentside. On these instruments the longest string runs up the middle, the next two on either side, and so on, with the two shortest strings on either end. Strings do not line up with keys, so a tracker system, similar to that found on organs, is used. Since the longest strings are in the middle with the shortest at the sides, clavicitheria with two 8' bridges and one 8' nut can always be spotted by the unusual bow shape of the nut.

In the instruments just described the pyramid shape and the two 8' bridges are used strictly for symmetry and do not modify the sound in any substantive manner. But in harpsichords with two 8' nuts and one 8' bridge tonal modification is exactly what was desired. Most often these instruments have a 3x8' disposition, with the normal two 8' sets of strings on the normal 8' bridge. Placed close to the gap, the second 8' bridge would carry the third set of 8' strings. This additional choir would be plucked by the jacks closest to them thus providing the same sort of nasal tonal modification produced by the English lute stop, in which a gap was "cut through" the wrest plank close to the nut.

These instruments are part of a large and interesting class of non-standard harpsichords, and an attempt will be made to explain them in that context.

Ed Kottick received his BA in music from NY Univ., and MA and Ph. D. degrees in musicology from Tulane University and the Univ. of North Carolina at Chapel Hill. After teaching at Alma College in Michigan, the Univ. of Kansas and the Univ. of Missouri at St. Louis, he came to the Univ. of Iowa in 1968. In addition to teaching he directed an Early Music program and performed as recorderist with a faculty Baroque Trio. His books, articles and reviews deal with Renaissance music, early keyboard instruments, performance practice, and acoustics. He is now writing a history of the harpsichord with Sheridan Germann, and a guide to keyboard instruments in European museums with George Lucktenberg.

