



THE

# AMICA

[www.amica.org](http://www.amica.org)

## BULLETIN

**AUTOMATIC MUSICAL INSTRUMENT COLLECTORS' ASSOCIATION**

*The Bovey Collection, Montana*



Volume 56, Number 3 - May/June 2019



# RENAISSANCE ANTIQUES OF SOLVANG



PURCHASE › SALES › CONSIGNMENT

*of Quality Cylinder & Disc Music Boxes, Musical Clocks & Automata*  
For over forty years we've placed fine antiques in collections around the world.  
Our reputation has been built upon appreciative buyers and satisfied sellers.  
Pictured are a few of the high quality musical antiques in our current inventory.



*Visit the charming Danish Village of Solvang, half an hour above Santa Barbara in the beautiful Central Coast Wine Country*



**RENAISSANCE ANTIQUES**

496 First Street, California 93463 › Ron & Julie Palladino  
Open Seven Days a Week 10-6 › 805-452-5700  
[www.renantiques.com](http://www.renantiques.com) › [info@renantiques.com](mailto:info@renantiques.com)



# THE AMICA BULLETIN

## AUTOMATIC MUSICAL INSTRUMENT COLLECTORS' ASSOCIATION

Published by the Automatic Musical Instrument Collectors' Association, a 501(c)(3) non-profit, tax exempt group devoted to the restoration, distribution, research and enjoyment of automatic musical instruments. AMICA was founded in San Francisco, California in 1963.

Visit the AMICA web site at: <http://www.amica.org> to enter the "Members-Only" portal.  
User Name: **AMICA**  
Password: **Hotglue@1963**

VOLUME 56, Number 3

May/June 2019

### FEATURE

- The Ghosts are Smiling Today – The Bovey Collection by Mike Edwards . . . . . 11
- Nickel Notes: Sandy Lechtick, The Coin-Op Guy by Matt Jaro . . . . . 16
- **Guide to MIDI:** The Value of MIDI by Spencer Chase . . . . . 24
- **Guide to MIDI:** Visual Roll Reader; Convert a Roll to MIDI by Dave Burritt . . . . . 26
- **Guide to MIDI:** Behind the MIDI Electronic Magic by Bill Klinger . . . . . 31
- **Guide to MIDI:** Arranging Music Rolls Through MIDI by Mikey Mills . . . . . 34
- **Guide to MIDI:** MIDI Utility Programs by Spencer Chase . . . . . 35
- **Guide to MIDI:** The Steinway Spirio: A Reproducing MIDI Piano . . . . . 37
- for a New Generation by Brian Wenzinger and Paul Manganaro . . . . . 40
- **Guide to MIDI:** MIDI Resource Directory . . . . . 40
- One March / Two Step; Wurlitzer's Three Uses of it by Matthew Caulfield . . . . . 42
- Bringing the Player Piano to the Public by Stuart Swanberg . . . . . 44
- 2019 AMICA Convention Update by Carl Dodrill . . . . . 46
- MBSI Convention by Matt Jaro . . . . . 48
- Around the Carousel World . . . . . 49

### COLUMNS

- Editorial Observations . . . . . 6
- The President's Corner . . . . . 7
- Membership Update . . . . . 8
- Calendar of Events . . . . . 8
- Letters and Items of Interest . . . . . 9
- Around the Carousel World . . . . . 49
- Chapter News (in chapter alphabetical order) . . . . . 50
- Advertising . . . . . 55
- Mechanical Music Restoration and Resource Registry . . . . . 57

**Front Cover:** Views of the Music Hall showing a small portion of the music machines on display from the Bovey Collection, Nevada City, Montana. Photos: Mike Edwards

**Inside Back Cover:** Ampico Ad. From "Music Trades" magazine, October 14, 1922 (Courtesy: Terry Smythe)



### AMICA BULLETIN

Display and Classified Ads  
Articles for Publication  
Letters to the Publisher  
Chapter News

#### UPCOMING PUBLICATION DEADLINES

The ads and articles must be received by the Publisher on the 1st of the Odd number months:

January	July
March	September
May	November

Bulletins will ordinarily be mailed in the 1st week of the even months, for expected delivery mid-month.

Glenn Thomas, Publisher  
165 Kildee Rd.  
Belle Mead, NJ 08502  
Phone: 908-431-0490  
e-mail: [wurlitzer165@gmail.com](mailto:wurlitzer165@gmail.com)

### MEMBERSHIP SERVICES

#### Membership Dues:

USA Bulk Mail . . . . .	\$60.00
USA First Class . . . . .	\$75.00
Overseas . . . . .	\$75.00
Canada-Mexico . . . . .	\$70.00
Student . . . . .	\$25.00

(pdf version only)

Address changes and corrections

Directory information updates

Additional copies of  
Member Directory. . . . . \$25.00

Single copies of back issues (\$10.00 per issue – based upon availability)

Lyle Merithew & Sandy Swirsky  
416 Colfax Drive  
San Jose, CA 95123-3403  
408-227-9284  
[membership@amica.org](mailto:membership@amica.org)

To ensure timely delivery of your BULLETIN, please allow 6-weeks advance notice of address changes.

AMICA Publications reserves the right to accept, reject, or edit any and all submitted articles and advertising. While the AMICA Bulletin offers accurate and historic information to its members, the bulletin, its publisher and the AMICA Board cannot be held responsible for contributions that may be considered by some as inaccurate, speculative, or of an OP/ED Format



# AMICA INTERNATIONAL

## – INTERNATIONAL OFFICERS –

### PRESIDENT

**Joel Cluskey**  
677 Fruithurst Drive  
Pittsburgh, PA 15228  
412-779-0740  
ampico2018@gmail.com



### PAST PRESIDENT

**Alan Turner**  
148 Kingsway Avenue  
Winnipeg, MB, Canada R3M  
0H1  
204-489-3075  
duo-art@mts.net

### EDITOR

**Glenn Thomas**  
165 Kildee Road  
Belle Mead, NJ 08502  
908-431-0490  
wurlitzer165@gmail.com

### VICE PRESIDENT

**Michael Walter**  
65 Running Brook Drive  
Lancaster, NY 14086-3314  
716-912-0283  
mikew\_14086@yahoo.com

### TREASURER

**Joe Orens**  
8917 Wooden Bridge Road  
Potomac, MD 20854-2448  
301-340-6664  
orens@prodigy.net



### SECRETARY

**Bob and Bonnie Gonzalez**  
26 Foremast Cove  
Corte Madera, CA 94925  
415-924-6834  
bobsrags@gmail.com



### MEMBERSHIP SECRETARY

**Lyle Merithew & Sandy Swirsky**  
416 Colfax Drive  
San Jose, CA 95123-3403  
408-502-6019  
membership@amica.org



## – COMMITTEES –

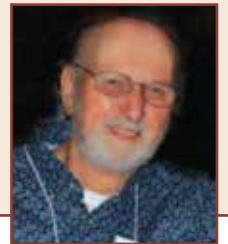
### PUBLICATIONS COMMITTEE

**Glenn Thomas**  
165 Kildee Road  
Belle Mead, NJ 08502  
908-431-0490  
wurlitzer165@gmail.com



### CONVENTION COORDINATOR

**Frank Nix**  
6030 Oakdale Ave.  
Woodland Hills, CA 91367  
818-884-6849  
nixmusic7811@att.net



### WEBSITE MANAGER

**Michael Falco**  
518 Boxwood Drive  
East Yaphank, NY 11967  
631-834-3244  
websitemeister@outlook.com

### AMICA HONOR ROLL

**Tim Baxter**  
939 Briarcliff Rd NE  
Atlanta, GA 30306-4664  
404-377-1220  
baxdig@mindspring.com

# AMICA INTERNATIONAL

## CHAPTER OFFICERS

### FOUNDING CHAPTER

Pres: John Ulrich  
Vice Pres: Roy Powlan  
Sec: Unfilled  
Treas: Lyle Merithew & Sandy Swirsky  
Board Rep: Bob Gonzales  
Reporter: Bob & Bonnie Gonzalez

### BOSTON AREA

Pres: Bill Koenigsberg  
Vice-Pres: Barry Kasindorf  
Sec: Kirk Russell  
russellmusicco@aol.com  
Treas: Chris Christiansen  
Reporter: Phyllis Konop

### CHICAGO AREA

Pres: Margaret Bisberg  
Vice Pres: Richard Van Metre  
rdecanter@aol.com  
Sec: Rob DeLand  
Treas: Paul Mayer  
Reporter: Wynette Edwards  
wynettedwards@gmail.com  
Board Rep: TBD

### HEART OF AMERICA

President: Mike Schoeppner  
ms-ss@swbell.net, 816-767-9766  
Vice President: Ken & Virginia Filardo  
Secretary: Bob Stout, stoutpiano@yahoo.com  
816-833-1556  
Treasurer: Greg Moffitt  
Reporter: Dan Davis  
Board Rep: By appointment

### LADY LIBERTY

Pres: Vincent Morgan - 718-479-2562  
Vice Pres: Marie Beemish  
Sec: Andrew Lardieri  
Treas: Maryam C. Morgan  
Reporter: Martin "Buzz" Rosa  
Board Rep: Vincent and Maryam Morgan

### MIDWEST (OH, MI, IN, KY)

Pres: Don Johnson - 248-650-1840  
bodon@worldnet.att.net  
Vice Pres: Bob Andersen  
Sec: Liz Barnhart  
Treas: Alvin Wulfekuhl  
Reporter: Christy Counterman  
Board Rep: Liz Barnhart

### NORTHERN LIGHTS (MN, ND, SD)

**Manitoba, Northern Ontario**  
Pres: Paul Watkins - 763-421-0672  
bpwatkins67@gmail.com  
Vice Pres: Don Barton  
Sec: John Ellingson  
Treas: John & Sue Ellingson jetoys@aol.com  
Reporter: John & Sue Ellingson  
Board Rep: Paul Watkins

### PACIFIC CAN-AM

Pres: Stuart Swanberg - 206 282-7376  
alisonswanberg@comcast.net  
Vice Pres: Rob Reid  
Secretary: Halie Dodrill  
Treas: Robert Wilson  
Reporter: Carl Dodrill  
Board Rep: Carl Dodrill

### ROCKY MOUNTAIN

Pres: Jere DeBacker - 303-570-6243  
jere@jeresppc.com  
Vice Pres: (vacant)  
Sec: Louise Lucero  
Treas: Barry Weiss  
Reporter: Larry Emmons  
Board Rep: Jere DeBacker

### SOWNY (Southern Ontario, Western New York)

Pres: Glenn Roat  
glennroat@yahoo.com  
Vice Pres: Larry Weingartner  
Sec: Shirley Roat  
glennroat@yahoo.com  
Treas: Holly Walter  
bballmomma99@yahoo.com  
Reporter: Mike Walter  
mikew@yahoo.com  
Board Rep: Holly Walter

### SOUTHERN CALIFORNIA

Pres: Diane DeTar  
Treas: Diane Reidy  
Board Rep: Frank Nix

### TEXAS

Pres: Bob Stewart  
Vice Pres: Wade Newton  
Treasurer: Jim Quashnock  
quashnock@aol.com  
Secretary: Jim Quashnock  
quashnock@aol.com  
Bulletin Reporter: Rich Clayton  
richclayton@sbcglobal.net  
Member at large: Annette Stewart

## AFFILIATED SOCIETIES AND ORGANIZATIONS

### American Theatre Organ Society (ATOS)

President/CEO - Ken Double  
1815 DeFoors Walk, NW  
Atlanta, GA 30318  
Phone: 404-790-5400  
E-mail: k.double@atos.org

### Theatre Organ

Co-Editors - Mike Bryant and Don Feely  
Editorial Office  
3111 NE 165th Pl.  
Vancouver, WA 98682  
Phone: 206-619-6645  
E-Mail: editor@atos.org

### Associazione Italiana Musica Meccanica

Villa Silvia - Via Lizzano, 1241  
47023 Cesena (FC), Italy  
Phone: 0039-547-323425  
Fax: 0039-547-661264  
E-mail: info@ammi-italia.com  
Website: www.ammi-italia.com

### Australian Collectors of Mechanical Musical Instruments

Peter Phillips - Editor  
26 Alice Street  
Padstow, NSW 221, Australia  
Phone: (612) 9773-4734  
E-mail: elecled@idx.com.au

### Netherlands Pianola Association

Nederlandse Pianola Vereniging  
Att. Jan van Hulzen, Member of the Board  
Chopinrode 25  
2717 BH Zoetermeer, Netherlands  
E-Mail: info@pianolavereniging.nl

### Carousel Organ Association of America

Editor/Publisher: Ron Bopp  
(918) 527-0589  
4725 Montrose Dr., Bradenton, FL, 34210  
bopp@peoplepc.com

### Friends of Scott Joplin

1217 St. Croix Ct.  
Kirkwood, MO 63122-2326  
Website: <http://stlouis.missouri.org/fsjoplin>  
E-mail: fsjoplin@stlouis.missouri.org

### Herschell Carroussel Factory Museum

180 Thompson St.  
North Tonawanda, NY 14120  
P: (716) 693-1885 | F: (716) 743-9018  
Email: info@carrouselmuseum.org  
<facebook.com/herschellmuseum>

### International Piano Archives at Maryland

Performing Arts Library, University of Maryland  
2511 Clarice Smith Performing Arts Center  
College Park, MD 20742  
Phone: 301-405-9224  
Fax: 301-314-7170  
E-mail: dml37@umail.umd.edu

### International Vintage Phono & Mechanical Music Society

C.G. Nijssen, Secrétaire General  
19 Mackaylaan  
5631 NM Eindhoven, Netherlands

### Musical Box Society of Great Britain

Alison Biden  
St Giles Hilltop, Northbrook Close  
Winchester, Hants.  
SO23 0JR, UK  
E-Mail: ali\_biden@hotmail.com

### Musical Box Society International

Russell Kasselmann, Editor  
3420 Edgewood Drive  
San Luis Obispo, CA 93401  
Phone: (805) 439-1934  
Cell/Text: (253) 228-1634  
E-Mail: russell@irondogmedia.com  
Website: [www.irondogmedia.com](http://www.irondogmedia.com)

### Netherlands Mechanical Organ Society-KDV

A. T. Meijer  
Wilgenstraat 24  
NL-4462 VS Goes, Netherlands

### Northwest Player Piano Association

Everson Whittle, Secretary  
11 Smiths Road, Darcy Lever,  
Bolton BL3 2PP, Gt. Manchester, England  
Home Phone: 01204 529939  
Business Phone: 01772 208003  
E-mail: nwppa@hotmail.com

### Reed Organ Society

Jim Tyler, Editor,  
E-mail: organs@bdcsl.net

### Organ Historical Society

Rollin Smith, Editor, The Tracker  
E-mail: abrs@verizon.net

### Pianola Institute

Clair Cavanagh, Secretary  
43 Great Percy St., London WC1X 9RA, England

### Player Piano Group

Duncan James (Secretary),  
9 Christy Avenue, Chelmsford, Essex,  
CM1 2BG, England.  
E-mail: secretary@playerpianogroup.org.uk

### Smithsonian Institution

Division of Musical History  
Washington, D.C. 20560

### Society For Self-Playing Musical Instruments

Gesellschaft für Selbstspielende  
Musikinstrumente (GSM) E.V.  
Ralf Smolne, President  
Emmastr. 56  
D-45130 Essen, Germany  
Phone: \*\*49-201-784927  
Fax: \*\*49-201-7266240  
E-mail: president@musica-mechanica.de

## EDITORIAL OBSERVATIONS



Have you heard of the “Bovey Collection” or ever been to Virginia City and Nevada City, Montana? Serious mechanical music enthusiasts may have, but most likely won’t have been there. Did you know it is one of the largest, complete, and functioning collections of mechanical music and related memorabilia in the country? Or that the two cities are one of the most interesting, largest, and functioning remaining restored ghost towns?

Mike Edwards has maintained that collection for about the last 15 years and gives us a great photo-essay on that great collection as the lead article in this edition of The AMICA Bulletin.

Mike can only capture a small portion of this town and its delightful collection and history, but you can add it to your future road trips for a delightful experience.

\*\*\*\*\*

We also continue with the second of our three-part series, **“A Complete Guide to MIDI.”** Each of the three consecutive editions features a mix of reviews, user reports, technical information, and historical information.

We are still looking for additions to our **“Directory of MIDI Services”**, which includes a list of service providers for MIDI parts, installations, repairs, and other MIDI services. It should be completely populated by the third installment in the series.

Other featured articles include Matt Jaro’s profile of coin-op collector Sandy Lechtick, and a new way of scanning and preserving music rolls.

For those who keep track of Table-of-Contents trivia, this edition has the largest count of articles and fewest number of Chapter reports in a long time. Are the chapters on a winter hiatus?

.....

For a future edition we are working on a major reference article set about **“Contemporary Music Arranging and Production”**. Many mechanical music enthusiasts want more current, recent, or last generation music available on mechanical music media besides the traditional older music on rolls, books, and discs.

There is more music that meets these criteria available than people think. Further, there are many arrangers, producers, and crafts people producing more of this for a hungry market, and to help move mechanical music to a younger generation. AMICA wants to encourage and help surface and promote these efforts.

Please send us your articles, contributions, or referrals on anything appropriate that might fit that profile.

\*\*\*\*\*

Be sure to register for AMICA’s 2019 Convention in Seattle. Organizer Carl Dodrill has final information and an update in this issue. You will also see a registration form and information how to make hotel reservations. This will be an outstanding event and you will want to make your plans now.

.....

Please welcome several new display advertisers in this edition. They have come to AMICA resulting from the demise of Carousel and Automatic Music News. We appreciate their business and choice of publications!

\*\*\*\*\*

Lastly, be sure to read President Joel Cluskey’s warning in the **“Letters”** section about hacking and email scams. Unfortunately, AMICA and its members are not exempt from this increasing concern and we want you to be wary and careful!

Regards,  
Glenn Thomas  
Wurlitzer165@comcast.net

## PRESIDENT'S CORNER

We all have a story to tell about what led us to become a part of this organization called AMICA. Matt Jaro does a wonderful job visiting members that have exceptional collections and always starts his discourse with how they discovered the hobby, profession, avocation, passion, or whatever term best describes their relationship with mechanical music.

These stories are a great part of the nostalgia that we all associate with these instruments and Carl Dodrill and his Seattle team have made it clear that their convention is putting a strong emphasis on setting aside time to socialize with our members and share our stories with those who have this common interest.

My story starts at a very young age, but I never realized it until much later. By young, I'm talking about spending a lot of time as a young boy crawling around at home under this big 5'-8" ebony piano with double legs called a Knabe. I always wondered why there were all these black tubes intricately laced through a complex assembly of black components screwed to the bottom.

Several years later my father bought me a second-hand American Flyer model railroad set that required a lot of space to set up. I used the unoccupied back corner crawl space under our house with a head clearance of four feet and spent endless hours there building railroad layouts, cities, and buildings. In the far corner of that crawl space were three old wood crates with wooden lids. What were in those old mysterious boxes? I asked Dad more than once, and the answer was always, "those are AMPICO rolls" stated with a subdued reverence.

By now you have figured out that Knabe piano was an AMPICO (Style A-GE). Legend has it that back in the early 1950's dad, who was a quite accomplished pianist and organist, would entertain a lot. While he "played" the Knabe, he would suddenly get up and walk away to the amazement of the guest as the piano continued to entertain! Well, fast forward to the mid 1960's when the reproducer no longer worked, and it was subsequently gutted. Only a few of the AMPICO escutcheons were saved as souvenirs. I never heard it perform and it wasn't until I was out of college that I learned what a player piano was. Friends who sang in our church choir had a well restored upright player in their basement and they would invite us over on Thursday nights after practice to sing along with the piano. I was hooked as soon as I sat down and pumped it. My future wife Georgeanne was a part of the group and those parties are some of the most memorable times of our dating.

I began to wonder, "How did this relate to Dads' mysterious AMPICO rolls?"

So that's the first half of the story and it lays the groundwork for what led to developing an avocation to restoring player pianos. The second half of the story will have to wait for another time when my Story of The AMPICO continues to unravel.

So, this year in Seattle take advantage of all that it has to offer, the places to see, things to do, and perhaps most importantly, the stories to tell!

Musically Yours,

Joel Cluskey

AMICA President

[Ampico2017@gmail.com](mailto:Ampico2017@gmail.com)



*Joel (center) with his brothers on Easter morning in 1964 with the Knabe in the background.*



*One of the wooden crates that held the AMPICO Rolls.*



## CALENDAR OF EVENTS

Event	Date	Location	Sponsor / Add'l. Info.
2019 International Convention	July 2-7, 2019	Seattle, Washington	Pacific Can-Am Chapter
2020 International Convention	Summer, 2020	San Francisco Bay Area	Jointly with MBSI
2021 International Convention	Summer, 2021	New Orleans, Louisiana	AMICA
2022 International Convention	Summer, 2022	Los Angeles, California	Jointly with MBSI

AMICA members are encouraged to send potential listings to the editor. Chapter meeting listings are encouraged, and will be automatically listed if the editor is aware of them. Events may be local or national, need not be exclusive to AMICA or be sponsored by AMICA. Events sponsored by affiliated organizations may be included if they have a direct or potential interest to AMICA members. In submitting listings, remember the "Bulletin received date" for readers is substantially later than your notification date to the editor.

## NEW MEMBERS

<b>David Allan</b> Orange, CA	<b>Vince &amp; Mary Jo Holter</b> White Marsh, MD	<b>Barbara Nelson</b> Winnetka, IL	<b>Larry Reece</b> Minnetonka, MN
<b>Wayne Boksa</b> Forest Park, IL	<b>John and Diane Hupcey</b> Poughkeepsie, NY	<b>Clark Ortone</b> Oxnard, CA	<b>Anita Stull</b> Beaver Dams, NY
<b>Jeffrey Coffin</b> Port Jefferson Stat., NY	<b>Cynthia Jacob</b> Woodland, CA	<b>John &amp; Shirley Ann Perschbacher</b> Manistee, MI	<b>Tom and Ann Turrin</b> Park Ridge, NJ
<b>Robert Fleder</b> New York, NY	<b>Richard Kimmie</b> Bonney Lake, WA	<b>QRS Music</b> Naples, NY	<b>Tim Wagner</b> Bloomington, IN
<b>Hamilton, Dean</b> Avon, CT	<b>Ken &amp; Maridith Koch</b> Marion, IA	<b>Richard Rames</b> Minneapolis, MN	<b>Frank Wenzel</b> Palm Springs, CA
<b>Keith Hannah &amp; Terry Jones</b> Puyallup, WA	<b>Don Miholovich</b> Seattle, WA		

## REVIEWS

*AMICA Bulletin is pleased to inaugurate a "Review" section. Members may submit books, other publications, software, music rolls, CD's, DVD's, and similar media to be reviewed by a qualified member of the Board and / or Publications Committee. All submissions must be from the author / creator only, and will be retained by AMICA in its library. Reviews for accepted media will be published in this section in the Bulletin. AMICA may reject any submission for return to sender.*



## LETTERS AND ITEMS OF INTEREST

Dear Fellow AMICANS,

Recently I was targeted by two separate e-mail scams, one related to my professional business and one through my AMICA e-mail. In one instance the spammer used my name to convince people to send money. It claims I am in a difficult situation and takes advantage of ones' charity or good-faith efforts to help. Never respond or act on these requests to purchase gift cards, use PayPal, or send bitcoins to transfer money. The other scam was an effort to get one to open a file attachment that could contain some type of virus. Fortunately, to my knowledge no one has been negatively impacted by any of these attempts.

To my frustration, our network consultants have told me that very little can be done and rarely are these thieves caught and punished. Our best defense against these criminals is to stay informed of their schemes. That is why I include this note in this month's Bulletin. The wonders of technology bring great opportunities, but unfortunately, dishonest people take advantage of that technology and can use it to steal.

Your President,  
Joel C. Cluskey

## DEPARTMENT OF CORRECTIONS

Sharp-eyed member Walter Tenten from Germany pointed out a breach of Volume / Number protocol. In the November / December, 2018 Bulletin, we incorrectly jumped a year and showed "Volume 56" on the cover, rather than continuing the proper "Volume 55, for 2018. We compounded the error starting in 2019 by jumping to Volume 57, when 2019 should have been starting at Volume 56.

Confused? We were too. We would love to tell you that this was a trivia test for sharp-eyed readers, but alas, no. Only one astute reader noticed. This issue properly resets the Volume number to 56, Number 3.





I'd do a Back Flip  
to add to my Baranager  
Motions Collection!



I'm also looking  
for the "Writer";  
Sydney clock,  
mechanical  
advertising  
window displays  
and working  
models.



**Sandy Lechtick**  
California collector of penny  
arcade, coin-op, automatons  
and automatic music.



**21241 Ventura Blvd., Suite 293, Los Angeles, CA 91364**  
**(818)383-6000 [sandy@thecoinopguy.com](mailto:sandy@thecoinopguy.com)**

# THE GHOSTS ARE SMILING TODAY

## The Bovey Collection: Virginia City, Montana

By Mike Edwards



*Music Hall in Nevada City*



*Charlie Bovey in his office*

In 1997, the state of Montana took over the ghost towns of Virginia and Nevada City. Today they have become two of the largest fully operational ghost towns and musical collections in the United States. With the support of the state and the hard-working residents, these towns are starting to come alive once again.

Virginia City is one of the last true ghost towns in the United States. It started back in 1863 when gold was discovered in Alder Gulch. It became the first capital of the Montana Territory (1864-1875) and the population quickly grew to over 10,000. Alder Gulch yielded an estimated \$30 million in gold between 1863-1866. But like most gold rush towns, when the gold ran out in the 1890's so did most of the town folk and by 1940's the town consisted of a meager 150 people.

The towns in Montana had a lot of businesses that closed when the gold ran out or the Depression hit. The shop owners just closed the door and walked away leaving all the inventory still on the shelves. In 1945, an ambitious young man named Charles Bovey from Great Falls, Montana stopped by Virginia City. He saw the towns people cutting up the log cabins for firewood and it broke his heart. This motivated him to start a personal journey of purchasing all the buildings in both Virginia City and Nevada City and restoring them to their original glory.

Charles Bovey was born May 1, 1907. His father C.C. Bovey, a director of General Mills, sent him to Great Falls, Montana in 1926 to learn the mill business firsthand. He fell in love with Montana and did not return to Minneapolis. He instead decided to start one of the largest wheat and cattle ranches in Montana. He married Sue Ford, daughter of Charles Ford, who was a cattle rancher, miner and the president of the

First Nation Bank of Great Falls. Today, it is known as Wells Fargo, which has the stagecoach from Montana in its logo. Charles did quite well for himself. He became a state senator in Montana, which gave him the ability to use his influence and love of history to help Virginia City become what it is today.

Charles Bovey had a good eye for finding unique and unusual things. He collected old Model T cars and trucks and had a car garage with working mechanics on hand to restore his cars in the summer. He acquired hundreds of old horse-driven buggies, carts, wagons, and fully stocked blacksmith shops. He had over 600 virgin wagon wheels, that have never been put on a wagon. He also acquired over 300 pairs of women's button up shoes, in their original boxes. Today, every shop is filled with the original things that came from the turn of the century.

He started to find the old coin operated instruments that came out of the aging bars, hotels, cat houses and stores from some of the mining towns. Building a large collection of instruments, he filled the bars and buildings in his town. He added the Music Hall that was formerly the Recreation Hall at the Canyon Lodge in Yellowstone Park.

In 1958 Charlie was on a trip to New York and met a helpful organ grinder who was playing on the streets. He didn't know it at the time, but this street musician held the secret to what is now known at the Great Music Hall in Nevada City, MT. This grinder mentioned that he should speak to a man at the Molinari Organ Works in Brooklyn, New York. Once there, Charlie discovered one of the largest organ collections he had ever seen. He also found out that he had come at just the right time as the Mayor of New York had just placed a city-wide ban on large organs and street musicians, including organ grinders. This meant the business itself which included the entire collection of band organs, Molinari Barrel Pianos and





*Charlie Bovey with the 89-key Gavioli organ*



*Inside a Nevada City building*

other musical instruments from the turn of the century was up for sale, Charlie jumped at the opportunity and purchased the business right then and there.

Since then, the musical collection has grown over the years. It includes music boxes, photographs, upright pianos, square grand pianos, large coin pianos and big band organs which are in place around the two towns. Unfortunately, tragedy struck in 1983 when several of the larger instruments were lost in the Bale of Hay Saloon fire. This included the Seeburg G, Coinola Reproduco Pipe Organ, Cremona style J, and a Seeburg J that were in the building.

Despite the loss of the instruments, today Virginia City has one of the larger public viewable collections of automatic musical instruments in the USA. Many of the original instruments are still being enjoyed by the public on a regular basis. Including the last Cremona Photoplayer M-3 (which is used for live musical theater in VC Opera House), two Seeburg Ks, an L and a KT, Cremona Style 3, G, two Mills Violanos one single and a Deluxe Model with two violins, a Peerless 44, Nelson-Wiggen Style 8, three 27" Regina music

boxes, a Regina Sublima Piano, a Wurlitzer DX, Pianino, Harp Style A, a theatre organ Style 135 with piano console, Wurlitzer band organs – 103, 146, 150, and 180, and three Gaviolis – 46-key, 65-key and 89-key.

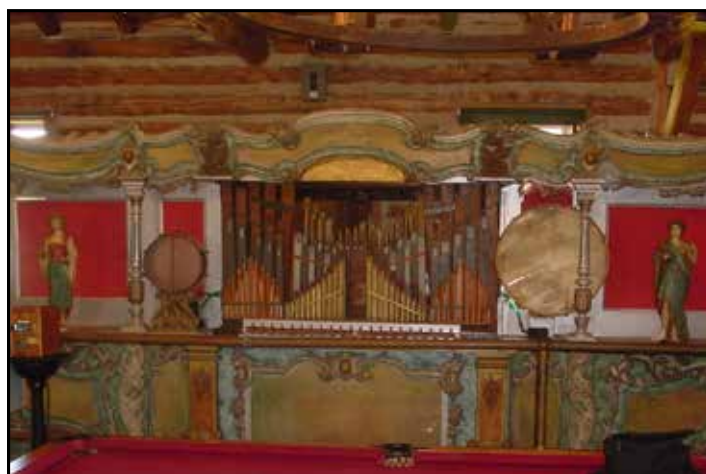
We can thank our good friend Richard Reutlinger for working with us over the years to help the restoration and maintenance of the collection. By working with AMICA and Art Reblitz on the Adopt-A-Piano project in 2006, they were able to rebuild the Wurlitzer DX piano, which for the last thirteen years has been entertaining thousands of people every summer.

Charlie Bovey's dream was to save the Old West. Virginia City and Nevada City is where he made the dream come true. After Charlie died in June 1978 his wife Sue and son Ford were not as interested in the old towns as Charlie. So, over the next 30 years the age was starting to show in the old ghost towns. Sue died in the late 1980s and her son Ford was left with the decision of what to do with his dad's town. In 1997 he made a deal to have the state of Montana buy both the towns and the collections that were still in all the buildings. This has saved the collection from being broken up.



Gavioli 46 key Band Organ, ca. 1890's with Dollé facade.

*46-key Gavioli organ*



*65-key Gavioli organ*





*Bale of Hay Saloon and Opera House*



*Bale of Hay Saloon - oldest bar in Montana*

Next to the Smithstone, it the largest collection of American history (over a million and half artifacts). It has become the largest state-owned tourist attraction. Over one half a million people enjoy the old ghost town every year.

I have been working with the Montana Heritage Commission for the last fourteen years, working on the instruments in this unique collection. When I started working, the last person that had tuned or worked on any of the instruments was Art Reblitz back in the 1970's. There is a lot of work to do, but slowly we are starting to see things play again. It's a time and money thing. It is fun to see the people's reaction, seeing and hearing this unique collection. Sorry to say, but most people have not seen or heard most of instruments that are in this collection.

If you have not been to Virginia City and Nevada City in the last ten or twenty years, stop by and see the things that are being fixed. The State has spent a lot of time and money repairing and rebuilding the structures and collections. But it will take a lot more time and money to keep it going.

If you love history, stop by and have a beer at the Bale of Hay Bar, the oldest bar in Montana. Stay at a turn of the century hotel, take in a live performance at the Gilbert Brewery, the oldest brewery in Montana, see a family friendly show at the Opera House, which is celebrating their 70-year anniversary this summer. Check out the Gypsy Arcade and see the 1906 Mills Verbal Fortune Teller Machine, take a train or a stagecoach ride, and come see history come alive. Enjoy all these activities and more that will help you step back in time in Virginia City and Nevada City, Montana.



*43-key Butterfly organ*



*Gypsy Arcade*



*1906 Mills Verbal Fortune Teller*



*Seeburg KT*



*Nelson - Wiggen Style 8*



*Story and Clark player reed organ*



*Vocalion reed organ*



*Wurlitzer Theatre organ style 135*



*Street scene of Virginia City, Montana*



*Wurlitzer Automatic Player roll changer piano*





*Left & Right: Virginia City General Store and display.*



*Left: Seeberg K and Mills Violano.*

*Right: Wurlitzer Harp.*



*Left: Nipper listening to a tune.*

*Right: Peerless, Regina Sublima, and Mills Violano.*



***About the Author in his words:*** I have been in the piano business for over 45 years, with certification from Yamaha, Baldwin, Steinway and Aeolian piano companies. I have rebuilt hundreds of pianos, players, reed organs, nickelodeons, calliopes, band organs, harpsichords and some MIDI interface units. Bringing an instrument back to the original condition has given me great joy over the years

Working on the Bovey collection is a great story. In 2003, I rebuilt a player for Amy Sullivan who asked if I had been to Virginia City, Montana. I had in the early 80's and the collection was in bad condition. Amy was the head of the Montana History foundation, one of the groups working on restoring the old ghost town. So, over the last 15 years I have been trying to get the collection back in shape.

For the last four years, my wife and I have been spending summers in Virginia City. My wife, Lana runs the Gypsy Arcade, with all the arcade games from the turn of the century. I am trying to keep as many machines working as possible. Most visitors have never seen or heard any of these instruments. Many tell me it is the highlight of their trip. We are happy Montana is saving the collection, but it will take a long time to get to all the instruments working. Contact me at [piano@rushmore.com](mailto:piano@rushmore.com). For more information on Virginia and Nevada City, see [www.virginiacitymt.com](http://www.virginiacitymt.com).



# NICKEL NOTES: Sandy Lechtick: The Coin-Op Guy

By Matthew Jaro

For this edition of Nickel Notes, I have the honor of presenting **Sandy Lechtick**. Sandy is primarily a collector of coin-operated arcade machines, but he also has a collection of automatic musical instruments, Baranger Motions and mechanical advertising displays. The arcade machines are extremely interesting to me, and I hope they will be of interest to our readers.

## The True Collector

When Sandy was five or six years old, he would walk up and down the street looking through trash cans for any old stuff. After this period of random collecting, he would amass Paper-Mate pens, matchbook covers, then geode rocks, butterflies – and just about anything. His real love as an 8 or 9-year-old- was his coin collection. With extra money he earned on his paper route, he walked into banks, grocery stores and toy stores and exchanged all his money for rolls and rolls of pennies, nickels and dimes. By ten years old, he had put together a robust collection, but could never find the 1909 SVDB or 1914-D pennies. The thrill of the hunt and anticipation of finding a rare coin gave him the ultimate adrenalin rush which has not subsided.

This is the true collecting spirit that we all know and love!

## Putting Together a Game Room

Many years later, when Sandy was in his early thirties, he wanted to have a game room in his first house. That consisted of a pool table, an antique cash register and a Playboy pinball machine. Later again, when Sandy was in his late thirties and forties, he used to love going to swap meets, especially the Rose Bowl and Long Beach swap meets (among the largest in the United States). The stuff that seemed to be the most prevalent were gumball machines and occasionally, a jukebox or maybe a cash register. Sandy just sensed that there had to be more. He loved the mechanisms and the elegant craftsmanship even though he is extremely unmechanical.

One day, Sandy picked up the Antique News and noticed that a person who was advertising had a picture of a jukebox, a cash register and a pinball machine. The ad also mentioned that he would buy one to a hundred coin-op machines. Sandy thought, "Wow! If he could buy one to a hundred, he must have a hell of a collection or a huge appetite. He couldn't have



*Sandy Lechtick in front of Baranger Motions*

kept all that stuff, so he might be willing to sell something." Sandy called the fellow named **Ira Warren**, a New Yorker who moved out to California. He sensed Sandy's enthusiasm and invited him over. Ira, who loved demonstrating his unique display of coin-op machines, lived twenty-five minutes away by car. Sandy drove a hundred miles an hour to get there.

When Sandy saw the stuff that Ira had, he was completely awestruck. It was like eighteen bolts of lightning hit him. Ira had a lot of stuff that Sandy had never seen before. He had extraordinary penny arcade and gambling machines from 1900 to the 1940's. He had vending machines. He had cast iron slot machines. He had European candy vendors. It was like a museum in a guy's house. This really changed Sandy's life as a collector. It was as if he had been semi-blind and put on glasses to attain 20/20 vision. While Sandy was competing nationally in paddle tennis and then later table tennis, he made it his mission to build a cool and unusual collection. While rarity was a factor, he zeroed in on machines that were fun, challenging to operate, visually exciting or had the "Wow" factor.

## The Search is On

Sandy said that there are so many things to do in life that if something is worth doing it's worth overdoing. As a collector, he was on steroids. Sandy was going to look for machines, not only at swap meets, but at collector clubs. He discovered a club in Southern California with members that were drawn to coin-operated machines. This "club" turned out to be the largest coin-op organization in any state. Then Sandy found





*Portions of The Arcade*

out about a coin-op show in Chicago called Chicagoland Antique Advertising, Slot Machine and Jukebox Coin-op Show. It's held twice a year near Chicago, Illinois and is the biggest show in the United States.

Eventually Sandy developed a relationship with **Chuck Wolf**, who is not only one of the top pickers for jukeboxes in the U.S. but hauled machines to collectors in California. Sandy soon became Chuck's biggest customer. Over the years, Sandy got to know a who's who of coin-op collecting and has been invited to the homes of more than a hundred collectors. He has reciprocated over the years and hosted several organizations including this one.

Sandy says that while we love to collect machines, it's the relationships that are important. First, the machines are not generally to be found at swap meets or in some grandmother's garage, but in the hands of other collectors. He has always believed in forming relationships, especially with (what Sandy calls) "impact players", who are powerhouses of knowledge, and those who have been pursuing their collecting passion for two or three plus decades. These are the Jasper San Filippas of the world, the Frank Nixes, the Glenn Thomases, the Ken Rubenses, the Mike Gorskis, etc.

Sandy started visiting every collector he could and got involved in organizations such as AMICA, MBSI and COCA (Coin Operated Collectors Association). Part of their annual meetings were devoted to visiting homes of prominent collectors. Sandy also went to museums like the Nethercutt collection and to auctions like the Milhaus auction a few years ago. He did everything a passionate collector should do in developing knowledge and developing relationships.

When he started serious collecting about eighteen or nineteen years ago, he decided to focus on quality and not quantity. So, Sandy had to add 2,000 square feet of space to his home. He also wanted thirteen and a half foot ceilings. This became totally filled up with some very unusual penny

arcade machines, 1940's neon signs, circus banners, popcorn and candy machines, rifle games, exotic Fortune Tellers and unusual games of skill.

## Mechanical Music Collecting

Then, roughly ten years ago Sandy's wife, who likes flowers, wanted to go to a place called Descanso Gardens. Sandy wanted to go to the beach to play paddle tennis, but he relented. In the middle of the place there was an odd-looking fellow, wearing a funny hat (looking like a train conductor). He looked like a vagabond – but he was cranking a monkey organ. Sandy thought, "That's pretty neat!". Sandy introduced himself and the man said he was a collector of this mechanical music. So, they started talking and that's how Sandy met **Frank Nix**.

It turned out that Frank lives about five blocks from Sandy. Once he visited Frank, he had another "Eureka moment", and decided to swerve into automatic music. He got to know many of the people who focused on musical instruments, and went to AMICA conventions in England, San Francisco, South Dakota, Princeton and Fresno. While he never entered the Pumper contests, he and his wife had terrific times.

Sandy always loved music. He was a singer and played guitar in college and then taught himself how to play the piano. He had a baby grand that played from a cassette deck. This was subsequently converted to floppy disk operation and then to an iPad. From the interactions with AMICA members and Frank, Sandy developed a knowledge of automatic musical instruments. He already had a couple of jukeboxes and three Scopitones. A Scopitone is a coin-operated 16-millimeter film player that for a dime would show one of 36 "campy" films of singers like Frank Sinatra Jr., Gary & the Playboys, Nat King Cole and other singers from the 50's. Sandy's first antique machine was a Mills Violano (seven or eight years



ago). Sandy put out the word to the coin-op community that he was interested in obtaining a Mills.

## Joe Montana

One of the locals knew a fellow in Arizona that had just acquired a Mills Double and didn't need the single violin Mills Violano anymore. He helped Sandy by brokering the deal. Sandy was grateful to the local man, so he took him and his wife out to dinner in Pasadena at a place named Chop's Steak House. When Sandy and his wife were sitting at the bar stools waiting for the broker and his wife, they started talking to a guy next to him. They talked about various things, including his wife who was always late.

The guy said that he was in professional sports and if you were one minute late to a meeting you would get fined \$100 per minute. He talked about having a stern coach. Sandy still had no idea who he was talking to. The broker and his wife showed up, so he introduced everybody. Sandy then asked the stranger (who was getting a little tipsy), if he wanted to have dinner with them. Sandy said, "What's your name?", and he sheepishly said "Joe". Suddenly, Sandy's wife said "**Joe Montana?**" It turned out that he couldn't join them for dinner because he was waiting for friends and they would leave together. This made Sandy's purchase of the Violano more memorable.

## More Music Machines

One day, Sandy was at Frank Nix's house where he saw a machine that he really liked. This was a Ramey Banjo Orchestra. He loved the music with its spirited melodies, great syncopation and peppy beat. He knew that sooner or later he would have to get one. A man named **Bob Pellegrini** had been a major coin-op collector in New York. When he died, his estate was auctioned off. Sandy was the high bidder and acquired the Banjo Orchestra. Another thing Sandy saw at Frank's house that he liked a lot was a Wurlitzer CX. A collector offered to sell Sandy a Wurlitzer "LX" but the price was a little high and Sandy passed. The man, **Tony DiSanto**, put it up for auction and Sandy bought it that way.

Other music machines include an Edgerton Seeburg KT Special reproduction, a Seeburg KT, a Decap accordion, and a Swiss Alps automaton with a band. The Seeburg KT came from **Marshall Fey**, of Reno Nevada, who had a saloon filled with musical instruments and slot machines. Fey's grandfather invented the Liberty Bell Slot Machine. The Seeburg KT was stored in his place for over fifty years. The Decap self-playing accordion is an accordion on a pedestal.

## The Collection Broadens

Sandy then started getting "big-time" into automatons, then into mechanical advertising displays. He became especially

interested in Baranger Motion Displays which were used primarily in jewelry stores. These are what Sandy is focusing on now. He really didn't collect a lot of musical instruments; however, he did obtain a Regina Hexaphone. This was an early jukebox that played cylinder records. While his house is pretty much filled, he suggested that he will ALWAYS make room for Baranger Motions and other automatons and coin-op. To the chagrin of his wife, he has outgrown the arcade space. For example, he has a Cleveland Grandma Fortune Teller in his living room and a Mills Strength Tester in the kitchen. He has a player piano and automatons in his office at his house and has put overflow machines in his office at work.

I asked Sandy what his first arcade machine was. He said it was a bed vibrator that he got from the Chicagoland Antique Show. I told Sandy that I remembered those. One day my wife and I checked into a motel and we put a quarter into the "Magic Fingers" slot. We wound up sitting on the couch until the time ran out on the machine! Sandy said it was from the 1950's but that was the first unusual item that Sandy obtained.

I asked Sandy how he met his wife, Sumi. Sandy said he used to rent out rooms in a house he owned. He would prefer female tenants and he said he ALWAYS kept it platonic. One Japanese-American girl wanted to live in the house, and her family came to check Sandy and the situation out. She had a dog who had recently died named "Snoopy". It turned out



*An automaton*

Sandy also had a dog named “Snoopy”. The girl moved in. One thing led to another and then they were married. Sandy suggests that Sumi made the first move.

## A Tour of the Lechtick House

Sandy’s house has five sections, each with a unique personality and collector aesthetic. The breakfast area has a Regina Hexaphone, an exotic peep-show, four or five nodder automatons, and some Baranger Motion displays. The noddors are so named since they nod or shake their heads and move their eyes. These are clock-work mechanisms. The theme of this area is OAK. There is an oak floor and oak table. The items range from turn-of-the-century to the 1930’s and 40’s. Sandy calls this his gambling den.

The living room is a normal living room, except that in the bar area, there are a couple of Mills Nickel “QT” slot machines. They were called “QT” because they could be quickly hidden from the police. They were used primarily in stores. They were also small, so they could be moved quickly (on the QT). There is a 1920’s Cleveland Grandma Fortune Teller. The Mills Violano Virtuoso is also there.

Sandy’s home office is the Mecca for advertising displays. These are electrified mechanical advertising displays that appeared in store windows. The motion attracted people passing by. He has about forty machines there. When you turn on the lights, all the machines would start moving. One machine is a 1920’s Dental device that would have a mouth and teeth opening and shutting. This came from one of the top coin-op collectors in the nation -- **Mike Gorski** who inspired a wave of collectors – especially penny arcade collectors. Mike died about a year and a half ago. Sandy also has an 88-note player piano in his office.

In another part of the house near the swimming pool, there is a Coca Cola room. This has a large 6-foot Coca Cola cooler, a Vendo 88 Coke machine, Coca Cola paraphernalia and two large neon Coca Cola signs. This is the red area. He has a pool table with red felt.

The theatre area has a 1930’s art deco theme with a Mills Panoram that plays soundies, a rifle game that shoots moving ducks, an old movie projector, a couple of 30’s Columbia Slot Machines, the Ramey Banjo Orchestra, a 6-foot figure from Grauman’s Chinese Theatre and a 12’ screen with red velvet theatre curtain that automatically opens and closes.

The main area is the penny arcade which is about 2000 square feet. This is totally dedicated to coin-operated penny arcade machines from about 1900 to about 1950. Sandy was not sure how many machines he has but stopped counting when he hit 200. When he runs out of room, he trades or sells. When a machine comes in, another must move out. Sandy suggested there is a very fine line between great presentation and clutter.

## Baranger Motion Machines

Baranger Motion Machines or “Baranger Motions” were store-window mechanical animated advertising displays that were rented to jewelry stores. They were produced from 1925 to 1959. The Wikipedia article on “Baranger Studios” describes the machines and their history. Typical dimensions were 21” wide, 12” tall and 12” deep.

I asked Sandy how he got started collecting Baranger Motion machines. There was an interesting fellow named **Bob McCord**. He owned the Sagebrush Cantina in the West San Fernando Valley of California. Once he visited Frank Nix’s house and was blown away by Frank’s music machines. So, Bob started acquiring mechanical music. He had a large orchestrion restored by **Johnny Verbeeck**. Bob also had a Baranger collection. One day the AMICA local



*Baranger Motions*





*Antique gambling machines*



*Arcade machines and Decap Accordion*

chapter visited Bob's house and Sandy saw the Baranger machines. He thought, "these are pretty neat, and they would fit in perfectly with my tastes."

Sometimes Bob McCord would overextend himself by buying too many mechanical music devices and have cash-flow issues. One day when he couldn't make payroll, he contacted Sandy with the idea of selling two Baranger duplicates. These were the first Barangers that Sandy obtained. His collection has grown to 35, and just like the thrill of collecting Lincoln pennies when he was nine years old, he still gets goose bumps upon finding a new Motion.

Barangers are made from a type of hard plaster, wood and a composite material. They were very sturdy since the Barangers were not sold but rented to jewelry stores all over the United States. They would be at a location for one month, then sent back in its large red box and the store would receive a different Baranger for the next month. There were about 165 different Barangers and like all collectibles, some are harder to find than others.

## Arcade Machines

I asked Sandy what his first arcade machine was. It was a 1920's Monkey Climb. You would insert a penny and you would pull up an iron handle to try to get the monkey to climb up a tree. Sandy said that the spring was so strong, you could practically get a hernia from trying to get the monkey to the top. Sandy has only one pinball machine named "Fun Fair" which has an animated face that opens its mouth and talks. This machine fits in with his other animated machines.

One of the machines that has an interesting story is "The Stripper". This is a machine from England. It was a life-sized woman behind a lighted-up heart. Included is a gun and a bulls-eye on top of the machine. You insert an English coin, and then "ooh-lala" Stripper music starts. You get four

shots. If you hit the bullseye, one article of clothing would come off. First the skirt, then the undergarment, then the bra and then.... With three successful shots all clothing except panties vanishes. After the game, the mechanism put all the clothes back on. The machine was made in England in the 1950's and they would be installed in pubs. During the last 20 years, Sandy has been told that only one other Stripper machine exists. All the rest of them were either destroyed or put out to pasture.

How he acquired this unusual machine is a story. Sandy placed an ad in a coin-op magazine and indicated that he was looking for a machine called "The Stripper". Sandy's Southern California friend Ira, who introduced Sandy to antique coin-op and who over the years sold Sandy several machines, called Sandy and started asking him questions about an unusual machine. While he didn't yet know it, Ira was reeling Sandy in like a fisherman reeling in a fish. Ira said, "That's interesting. I have a machine called "The Stripper". Have you ever heard of it?" The Stripper had been Number One on Sandy's wish list for the last decade. He knew that Sandy would be extremely interested, but Ira was a tough bargainer and he wanted an amount that Sandy thought a bit over the top. So, Sandy did not immediately express interest.

One day Ira called up and let Sandy know that another coin-op collector was extremely interested and if Sandy diddle-daddled much longer he would probably be kicking himself when he heard the machine had been shipped to the other collector. Sandy knew who it was, and he knew he was serious and had precious little time to make up his mind. While there were a couple of issues with the machine, Sandy got a local repair expert to give an estimate of the cost to repair it. The cost was a bit high, but Sandy reasoned that, he had never seen a Stripper, probably never would again, so saying "Yes" and doing the deal was a no-brainer. He just needed a gentle nudge.





*Arcade band*



*Mutoscope collection*

Sandy is very happy that he bought the machine. Of all his machines, “The Stripper” always gets the most attention. Sandy says that even the women laugh as much as the men after seeing this machine in action. Even people who have been collecting for thirty or forty years have never seen “The Stripper.”

Another machine that Sandy has is called a **Zodi**. This was made in the 1950’s. It uses an auto-typist. The auto-typist is a machine that can type messages coded on a paper roll. It uses pneumatic technology, so the roll is like a nickelodeon roll. With the insertion of a dime and the selection of your astrological sign, the keys start moving like magic and type individual three paragraph letters which corresponds to the astrological sign of the user. After the letter is finished, it cuts the sheet of paper and then blows it out the side into the waiting hands of the user.

This unusual application of auto-typist and player piano technology was so complex and difficult to repair that only a few are known to exist. **Jim Shrider**, a friend of Sandy and the expert repairman who brought Zodi back to life spent almost two years working on the machine and came close several times to throwing in the towel. He told Sandy that for anyone else, he’d have said “Absolutely no way.”

I asked Sandy if he could only take one machine with him to a desert island, which would it be? He said, it would be the Ramey Banjo Orchestra. As for arcade games, it would probably be a shooting gallery. He has seven or eight rifle and gun games.

## The Philosophy of Collecting

Sandy was attending an AMICA convention in San Francisco, and he was sitting on the porch of **Richard Reutlinger**’s house with **Terry Smythe**. They were talking about the different routes that collectors take. It’s sort of

like skiing across a slope, moving from one environment to another. They could start in one area, and something clicks, and they move into another area. This adds to the interest and opens the venue to new incredible acquisitions. Sandy started off with a jukebox or two, a cash register, then a pinball machine, then coin-op arcade and strength testing machines, then gambling, then fortune tellers and machines that had movement, then advertising displays and then Baranger Motions and then mechanical music machines.

Sometimes Sandy likes machines that are “ugly ducklings”, that never received much attention, or were hard to operate, destroyed or simply too tough to fix. One such machine is called a Vibrator Chin-up machine. It’s about eight feet tall and it has two rings. You grab the rings and do chin-ups and hit your head on the ceiling of the machine which rings a bell. When you insert your dime, there is a big motor on top of the machine that vibrates like hell, making it extremely hard to do even one chin-up. Sandy doesn’t think that the machine would draw much revenue and probably took up too much real estate. Sandy has been interested in athletics his whole life, having competed in gymnastics in high school and college, and then in national paddle tennis and table tennis championships. Consequently, machines that demand athletic skill or strength like the chin-up are very appealing.

Having visited collectors from the United States, England and other places Sandy concluded that while a lot of collectors have very fine collections, many of these collections remind Sandy of a museum – very interesting, but a bit sterile, cold and unemotional. Sandy’s vision was that when you think of an arcade, you don’t think of a museum but rather a place to have fun and enjoy the machines. Think of a guy shooting ducks to win a prize, impress his girl and give her a big teddy bear. Sandy wanted to acquire machines that had movement and action – where you could have fun rather than analytically observe machines with a stethoscope.

It was also important to present a collection in such a way that every time you turned a corner you would see unusual stuff. This could be arcade machines that you might have played when you were twelve or thirteen years old or in other cases, stuff that you've never seen. He wasn't focused on obtaining the rarest pieces and trying to outdo other collectors – but essentially buying stuff that he liked. In some cases, they were very rare and pricy. Yet, when people visited, they would feel like they were walking into a 1930's or 1940's arcade and feeling kind of young and bringing a smile. The collection would be things Sandy loved, things he had never seen and things that were just different.

Sandy mentioned **Jasper San Filippo**, who has a vast collection that is wonderfully organized in separate areas to

provide a sense of wonder to the visitor. There was a fellow name **Marvin Yagoda** who died several years ago. He had a 5000 square foot arcade which had a nice feel and was a lot of fun. Sandy tried to bring the spirit of these collectors to his own collection.

Sandy has had several organizations and hundreds of people visit him including the AMICA Southern California chapter and MBSI. Most of the photos Sandy has taken are not of specific instruments, but rather groups of people having fun.

Thanks for joining me on this most unusual tour. As always, comments are welcome. I can be reached at [mjaro@verizon.net](mailto:mjaro@verizon.net)



*Accountant on Rifle game*



*Arcade machine*



*Chin-up machine*

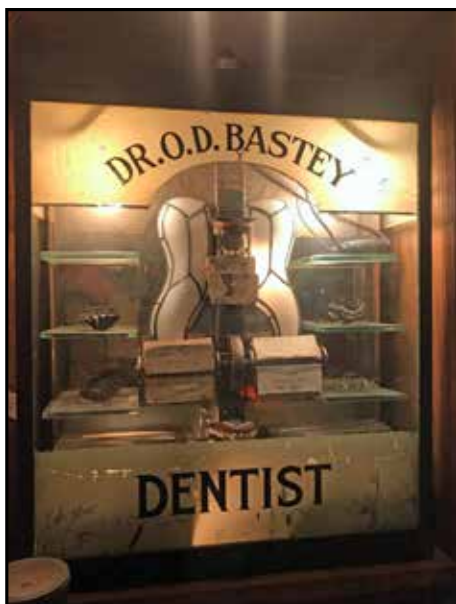


*Cleveland Granny and Seeburg KT Special replica*



*Swiss Alpine band*





*Dental machine*



*More Baranger Motions*



*Sandy with various machines*



*Sandy with Sumi*



*Various automata*



# THE VALUE OF MIDI

By Spencer Chase

## Complete Guide to MIDI - The Value of Midi

MIDI is an acronym for Musical Instrument Digital Interface, a standard for the representation and transmission of musical data recorded in binary files. MIDI was developed with psychoacoustic parameter studies and provides for the control of virtually all aspects of musical perception based on the ability of the human ear and brain to perceive them. MIDI has the capability to control pitch, rhythm, tempo, volume, tonality, and a host of other parameters beyond simply note-on and note-off. Within the scope of conventional automatic musical instruments, few of the advanced capabilities of MIDI are utilized. This article will intentionally avoid highly technical discussion with the intent as an introductory overview.

MIDI also includes a specification for the transmission of musical data. The standard was developed in an era of slow data rates but is still adequate for most uses today. Although there are better ways to transmit musical data with higher data rates and less temporal distortion, MIDI remains the most supported and robust format for recording and editing musical data.

The most common MIDI devices today are computer-based systems. MIDI keyboards and synthesizers generate musical tones in hardware, software or a combination of the two. Tones may also be recorded or “sampled” or synthesized in a variety of ways. Keyboards and computer-based systems may use a combination of sampled and synthesized sound ranging from simple electronic sounds to realistic representations of conventional musical instruments.

Most modern computers can interpret MIDI files and produce a “musical” performance. Most personal computers include a simple synthesizer that produces results adequate to identify a tune and arrangement but does not compare favorably to conventional instruments or sophisticated software synthesizers and samplers capable of producing much more realistic performances. The best hardware devices produce excellent simulations.

As a data storage and playback system MIDI is well suited to the goal of the preservation and performance of conventionally recorded performances, such as those on perforated paper. Data recorded on paper rolls is digital and very similar to digital information recorded in a MIDI file. Many modern instruments play MIDI files. MIDI keyboards and solenoid operated acoustical pianos are examples. Conventional instruments and pneumatically operated instruments may be retrofitted with electronically controlled valves allowing them to play MIDI files. These may be installed in a reversible manner with no permanent modification to the instrument. Such systems may greatly increase the available library of

music especially for rare instruments for which rolls may either be unavailable, or which may not be economically feasible to reproduce.

Even for more common instruments such as reproducing pianos, it is unlikely that all the available music will be reproduced in paper format. The availability of more music can only contribute to greater enjoyment of existing instruments and a greater likelihood that they will be maintained and preserved for future generations. With little or no music available, it is more likely that existing instruments will fall into disuse, striped or scrapped altogether.

Reproducing piano rolls may be converted, by a process known as emulation, to files for use with modern reproducing pianos. With appropriate software and enough care, performances on suitable instruments may be virtually indistinguishable from performances on original instruments.

Musical data in a paper roll is represented by the placement of holes in the paper with note-on information represented by leading hole edges and note-off information as trailing hole edges. Holes also encode pedaling and other modifying instructions. The same is true of a MIDI file. MIDI files are basically a series of “events”. This information is used by a playback device in a variety of ways.

The most common event types are “note-on” and “note-off”. Contained within the event are parameters that modify the note on and off instruction including the note value or tone (musical note such as C#) the time at which the note should start or end for a note-off and the loudness at which the note should be played. Other than loudness, a MIDI note on or off event achieves the same effect as the holes in a perforated music roll. Notes may also be assigned to different instruments, virtually any of the instruments of an orchestra as well as other instruments.

Most MIDI instruments can produce a digital data stream that can be recorded to a file using a computer program known as a “sequencer” which provides the user with graphical tools for creating and editing MIDI files. Paper documents such as sheet music and perforated music rolls may also be scanned and converted to MIDI files.

Once music is in MIDI format, it may be edited in a variety of ways and played using a software or hardware synthesizer, a MIDI equipped acoustical piano, pipe organ, or even wind and stringed instruments. It is not necessary to produce a music roll or other hard copy, a decided advantage over the production of paper music rolls. It is no longer necessary to have access to perforating equipment to produce or modify music rolls. MIDI files can be made by anyone with readily



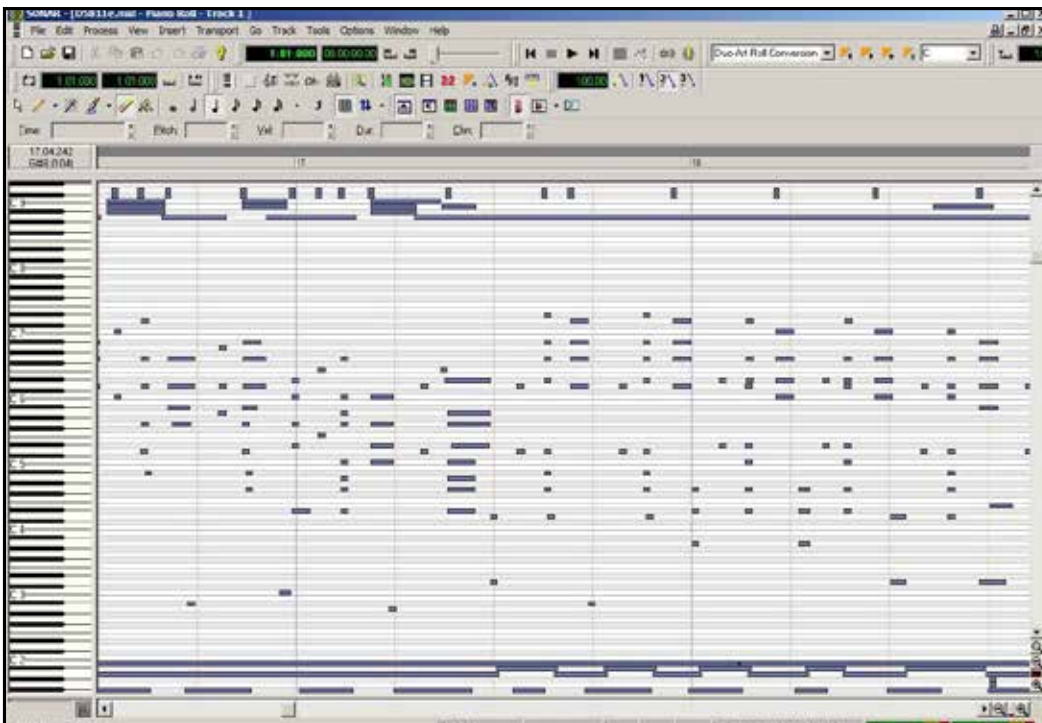
available software and can be transmitted electronically to roll production facilities if a paper copy is desired. Music from one instrument or other source may be rearranged for use on a different instrument without having to start over from scratch.

MIDI files require very little memory space. Thousands of files will fit on a single CD, many more on a DVD and huge numbers on hard drives. Backup copies and offsite storage assure that data will not be lost. Although storage technology changes, this is not a problem as there is always an overlap in the availability of current and "legacy" data storage techniques. Important data needs to be checked for degradation and copied to new media types as they become available. Compared to the simple storage of paper rolls this may seem like a lot of work but consider the fact that antique players of paper rolls and perforating equipment need maintenance and may not be available to the general public soon.

Several people have built optical scanning machines which may be used to create digital image files that may then be converted to MIDI format, edited and corrected of errors due to careless perforating or damage. Scanning produces files which then may be used to recreate the original roll or produce a version that is better than the original since both random and systematic errors of production can be removed - the subject of a future article.

Paper music rolls have proven to be a long-lasting medium for the storage of music in a digital format but were largely made with relatively low-quality paper. Over time the residual acid in this paper is activated by atmospheric moisture which causes the paper to weaken which would not be a problem if music rolls only needed to be looked at in museums. Weak paper does not stand up well to transport through a roll playing machine. The cumulative result is that many music rolls today are in poor condition and cannot be played without errors and eventual destruction. Rolls that are in good condition may be scanned before they deteriorate producing accurate files with little or no editing and may be used to perforate new rolls. Rolls not good enough to be played on an original instrument may also be scanned, thereby saving music that previously could not be saved by other than very laborious methods.

Although original pneumatic instruments are ingenious and amazing in their ability to produce truly musical performances, if not maintained in adequate condition they will fail to produce these results. As specialized materials become less available and labor costs increase it becomes less and less likely that these instruments will be retained and may impact the ability to preserve the music as well as the instruments. Converting the music to MIDI, a format that may be used by modern instruments, presents an opportunity to preserve this music.



*The similarity to a piano roll is evident in this piano roll view of a MIDI file in "Sonar" or "Cakewalk" sequencer software.*

**About the Author:** *Spencer Chase is a long-time member of AMICA. He has been scanning piano rolls for approximately 20 years and writing MIDI and other utilities to support playing of piano roll data electronically. His web site is: <http://www.spencerserolls.com/index.html>. Email him at: [spencer@spencerserolls.com](mailto:spencer@spencerserolls.com).*



# VISUAL ROLL READER: Easily Convert a Roll to a MIDI File

By David Burritt

## Complete Guide to MIDI - VISUAL ROLL READER

This article will show how I converted a nickelodeon roll to a MIDI (digital) file.

Background: I grew up in Butte Montana and my family would visit Virginia City, MT many times a year. This was in the 1960's and 1970's and if you are into mechanical music you probably know "The Bovey Collection", the large selection of machines on display. I was always fascinated with these mechanical marvels. Especially, the Mills Violano.

I was also fascinated by antique gambling machines (i.e., slot machines).

Fast forward to the early 1980s when I graduated college and had a townhouse of my own. That's when I started buying antique slot machines. At the time, I didn't have the room or finances for mechanical music machines.

Later, to the 1990s. I am now in a house and have a little more room. I found a reproduction nickelodeon for sale and the price is within my small budget. I know it is not an original Mills, Seeburg, Wurlitzer or whatever but it fit my needs. My antique slot machine collecting is also starting to take off.



*My original build-up nickelodeon*

By 2017. I am now retired and live in a home with even more space. The slot machine collection is pretty much complete. In the summer of 2017, I attended the Coin Op Collectors Association (COCA) annual convention in Ohio and one of the collections had a Mills Violano. The machine was not for sale, but it revived my desire to have one.

In the fall of 2017, I purchased a Mills Violano that had a 100-point restoration and had a MIDI system in it. I had talked to other owners of Mills Violanos and almost everyone who had one said if you get one be sure it has a MIDI system.

This was my first introduction to MIDI on a mechanical music machine. The first time I heard it play a song by the Beatles, I was blown away. The Violano came with several original rolls as well as some that were remade. It was great that the MIDI system was installed in such a way so that the original rolls could still be played as well as modern music. Therefore, I don't feel the Violano was violated.

I have talked to some music machine owners and asked them about MIDI. Some say, "I am a purist and have no desire for MIDI". While everyone has their own opinions, I think the people who designed these wonderful machines designed them to play music to entertain people. Much of the music from back in the day is not currently in favor and the only reasonable way to play modern music is via MIDI. I think the original designers would be thrilled to see their music machines still in use 100 years later and being enjoyed by people hearing modern music. I have played some of the original Mills music on my Violano and in most cases and to be blunt, a little of it goes a long way.

In addition, these original paper rolls are approaching 100 years old. Paper, by its nature, gets brittle as it ages. I had an original roll with my Violano and when I played it the roll started to self-destruct by the switches (it does not use a vacuum system). That is the last time the few original rolls I have will ever be played on my Violano. I also have some new rolls which play fine. MIDI is a way to preserve old and a one-of-a-kind roll forever.

MIDI might also get the attention of the younger collectors because it allows modern music to be played. If MIDI were not available for the Violano, I would not have bought one.

One of the really nice things about MIDI is that it allows me to play any song at any time. I don't need to find the roll that the song is on, rewind and remove the old roll, install the new roll, and wait until the song I want makes its way to the tracker bar.

The only thing I didn't like about the MIDI system on the Violano was that the coin acceptor mechanism was disabled with MIDI, and I had to use a laptop to control it. There was no way to use my smartphone or a tablet to control it. I have resolved both issues and that is for a later article.

Now, to the articles theme! Since I found MIDI to be so useful on my Violano, I thought it would be cool to allow my nickelodeon to run on MIDI. I then started investigating what it would take for the nickelodeon to operate via MIDI.

The first thing I needed to find was MIDI files for my nickelodeon. It turns out they don't exist (or I couldn't find them). I have about 20 rolls for the nickelodeon and about





*Original roll (left) and new roll (right). On the original roll, notice the paper is very close to falling apart. This is a perfect candidate to convert to MIDI, so the music is not lost*

12 songs or so per roll, so about 240 songs on paper rolls. Now, I needed to figure out a way to turn these songs into a digital form.

The paper travels over the tracker bar has a hole to indicate a note. When the hole gets uncovered, the note plays. This is typically accomplished by a vacuum system, applied to the tracker holes, and a tube from each hole to a pneumatic valve. When pressure is released, the valve triggers the note and when the vacuum is reapplied the note returns to normal position

MIDI works with a simple T connector from each tube with an electric air valve connected to the T connector. With power applied to the T valve, it allows air to enter the line and releases the vacuum. This is what the hole in the paper does when it passes over the tracker bar.

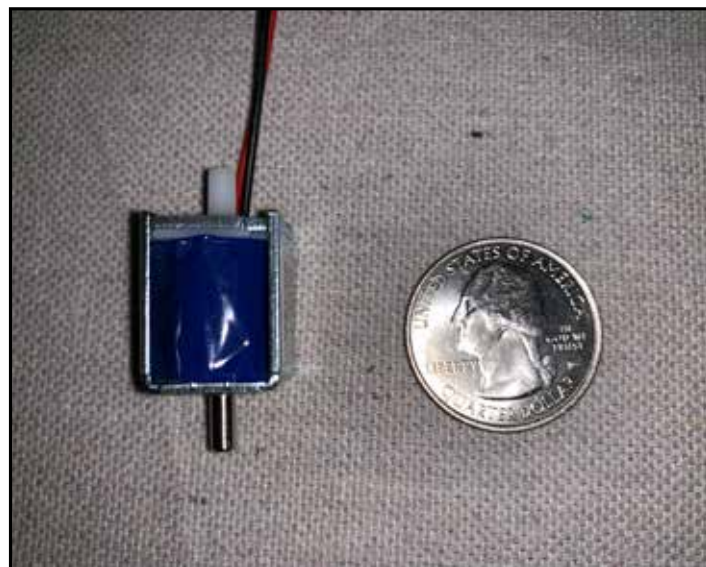
If the mechanical music machine has 88 holes in the tracker bar, 88 electric valves will be put in each air tube and those valves will be connected to a computer board which is

connected to a computer, which sends the MIDI commands (Note-On / Note-Off) to the correct valve.

There are a couple options to create a MIDI file from a music roll. All have advantages and disadvantages.

The first option is to build a modified tracker bar with small micro switches. Put the roll on this modified tracker bar and play the roll. The micro switches detect the holes along with the timing. The disadvantages here are complexity and cost. In addition, small micro switches could damage the roll. Therefore, this solution was out.

The second option was to build a modified tracker bar and use small photo cell resistors. This eliminates the microswitch and therefore would not damage the roll. However, it is expensive to build and there could be issues with getting false note positives if the hole had blemishes or markings. Therefore, this solution was out.



*MIDI electric air valve (with quarter for size reference)*



*The typical 88-note tracker bar and music roll on my nickelodeon.*



*MIDI control board*



*Computer and MIDI control board*

The final option was to find a software solution. A person in Japan did an experiment years ago by taking a video of an Ampico roll, read the holes as it played, and sent the notes to the computer speaker. This was intriguing to me and I modified the software to generate the MIDI files. I was able to get it to work but there were issues and it was very time consuming.

Since my background is computer programming, I decided to write a version of that Japanese program but take it to the next level. I wanted to write a general-purpose app which would work on any tracker bar. The number of holes doesn't matter. In addition, I wanted it to be easy to deal with false positives and work in a variety of lighting situations. It needed to be easy to configure the mapping of the tracker bar holes to MIDI notes. For example, you could say hole 1 maps to channel 1 note 42 on the MIDI hardware. The app should also allow the MIDI notes to be sent directly to the PC speakers and allow the same kind of mapping for the PC translation.

After a few days of programming I was able to achieve it and more. I have since tested on a Mills Violano and a Ragtime nickelodeon. I have preset buttons one can push to automatically configure the mapping for a Mills Violano or Ragtime Nickelodeon. If a different roll is being analyzed, it is simple to quickly build the mapping configuration and then save it to a file.

Below is the mapping for a Mills Violano. Notice the notes are in reverse order. The reason is when looking at the paper roll from the front of the Violano, the first hole on the left is note 123.

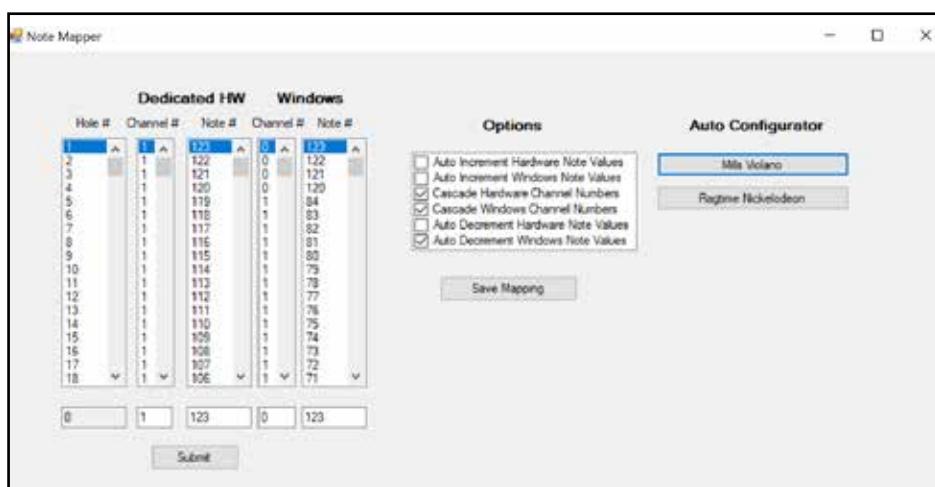
This mapping shows a Violano with no encryption. Many of the Violano MIDI systems include an encryption scheme. To play a MIDI file that was created from a roll, you need to know the encryption. When I got my Mills Violano, I wanted to get the piano tuned. The piano tuner wanted to hear the piano portion of the Violano run the rail (low note to high note). Therefore, I wrote a program to remove the encryption and create a MIDI file to run the piano rail.

For the app to do its job, you should supply it two video files. The first is a 5-second video showing just the tracker bar.

When you load the tracking bar video, the app will show the tracking bar and ask to click on the first and last hole of the tracking bar. Then the app will attempt to locate all the holes in between. After finding the holes, click on other holes that are outside the main tracker bar area.

The app will show you where it calculated the holes. If any of the areas are incorrect, you can move a detection area to the left or right. You can also move the entire tracking bar left, right, up, or down. You can change the distance between the holes in the tracking bar.

You don't need a video showing the tracking bar. It is just a little more difficult to do the calibration without the tracking

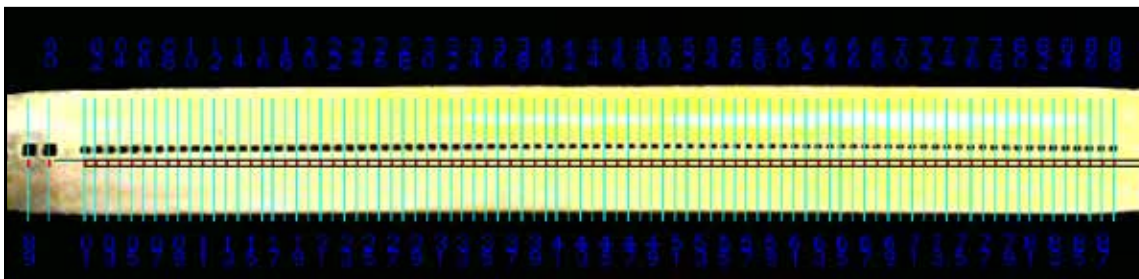


*Mapping for a Mills Violano*

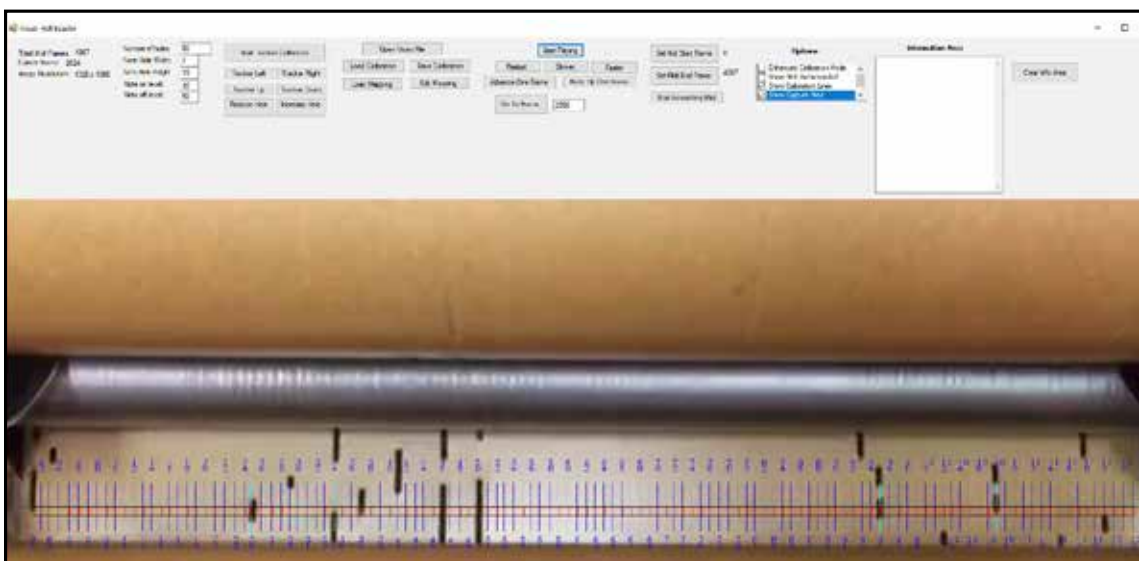




The app showing the tracker bar on my nickelodeon



The tracker bar with the capture points. The small red squares are the areas that will be examined as the roll is playing. To make it easier to see I have moved the red squares directly below the holes



The app analyzing a Violano Roll



Close-up Showing the capture area. The green lines indicate a note "ON".

bar video. This tracking bar calibration mechanism makes it easy to set the system up and takes less than a minute.

You can also easily adjust the size of the tracking hole. A tracking hole that is one pixel is ideal. This will greatly reduce the number of false "Note-On" messages.

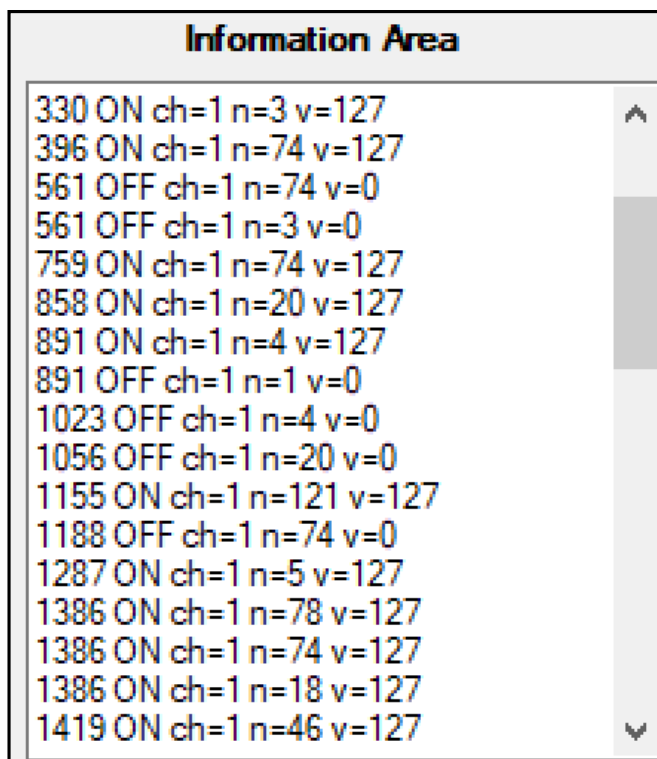
You can also adjust the sensitivity of the app. This is useful because of lighting conditions that were used when the roll video was shown, and because rolls may be different shades of color due to ageing.

You can save all the tracking calibration to a file, so you don't need to repeat it the next time you want to scan a song in. The same goes for the MIDI mapping.

Now you open the video file that was taken of the roll. The original app required the video to be 600 x 480 pixels. Visual Roll Reader should work with any resolution. The resolution I have been testing is 800 x 600 for the nickelodeon and 1920 x 1080 for the Violano. Here is a photo showing the Violano roll being analyzed with the calibration lines being displayed. Green lines indicate the software has detected a note ON message.

Once you open the video file, the first frame will be displayed. There are checkboxes you can click to show the area that will be used for optical recognition. When the tracking area is shown, they will change colors when a "Note-On" is detected. You can adjust the sensitivity of the optical recognition engine as the roll is playing or you can pause the roll and adjust it then.

When a roll is paused, you can advance the roll frame by frame or have the roll back up one frame at a time. You can also restart the roll playback at any point or go to a frame. When it is time to generate the MIDI file, click on a button to start writing to the MIDI file. Click on the Stop button to stop generating the MIDI. There is also an option to view the MIDI data in real time.



*Generated MIDI output*

Currently, I am unsure what I am going to do with the Visual Roll Reader. I may use it for my own needs, or I might offer a service where people can upload videos of their roll & tracker bar and I will convert them to MIDI. Another option might be to sell the app.

To learn more, go to [UniversalMIDIController.com](http://UniversalMIDIController.com) where a video will be posted, and you can email me via the "Contact Us" link. I have also created a Facebook group named "Mechanical Music and MIDI Systems" where I will be posting the progress of my putting MIDI on the nickelodeon and will also discuss this Roll Reader application.

**About the Author:** Dave Burritt lives in Colorado, but grew up in Butte, Montana where he became interested in mechanical music through the Bovey collection in Virginia City and Nevada City. He gradually built a large collection of vintage slot machines which turned into a business.

Dave has a master's degree in computer science which created other business opportunities and led to MIDI interest and applications such as the subject of this article. He has formed and developed several groups and sites in the coinop world: [CoinOpCollectorForum.com](http://CoinOpCollectorForum.com). ; [www.CoinOpPreservationSociety.com](http://www.CoinOpPreservationSociety.com).; [www.CoinOpRegistry.com](http://www.CoinOpRegistry.com). ; [www.AntiqueSlotMachinePriceGuide.com](http://www.AntiqueSlotMachinePriceGuide.com).

**See his MIDI applications here:** [UniversalMidiController.com](http://UniversalMidiController.com) and contact him through the "contact us" link on that site.



# BEHIND THE MIDI ELECTRONIC MAGIC: MIDI HISTORY and TECHNICAL COMPONENT

by William Klinger



## Complete Guide to MIDI - BEHIND THE MIDI ELECTRONIC MAGIC

MIDI is electronic storage and instructions to store data and operate digital musical instruments by using the digital information in addition to or in place of mechanical methods. Mechanical methods of data storage include pinned cylinders, punched cardboard books and punched paper rolls.

Pinned cylinders are mechanical storage and reproduce the information to levers or plucking a musical box comb using the stored information to reproduce the data. Entirely mechanical, the arrangement of the pins is limited to the cylinder size and arrangement. Some cylinders are arranged in multiple rows each row is one song. The cylinder can be moved from row to row to change the song that is played by the mechanism.

The number of rows was limited by the space between the mechanical levers operated by the pins. Each row, one time around the cylinder is one song. A variation on this was cob organs where the cob contains only one song, but the pins were in a spiral on the cob. As the cob turned, it moved along the spiral which allows a longer song to be stored on a small diameter cylinder.

Punched cardboard books in 'keyed' instruments had to have metal fingers that protrude through the openings in the cardboard and operate the mechanism inside the instrument. As the book moved past the opening, it pushed the key back to a closed position. The mechanism holding the keys and related rollers to pull the book through the organ was called a Key Frame.

Punched cardboard and punched paper rolls using either vacuum or pressure, operated some mechanism in the instrument to play a note. When the hole over the reading

device was open, as the hole closed, the mechanism stopped the music note from playing. The reading device was called a Tracker Bar and was usually connected to the mechanism by rubber or lead tubes.

Both pressure and vacuum were used in instruments. Where the action was under pressure and the hole let air out, a grooved roller held the book or paper down on the tracker bar. This type of action was often referred to as 'Keyless.'

The cylinder pins, keys in a book or holes in a book or roll do not make any sound. They only tell the instrument action whether a note is to be on or off.

In its most simple form, MIDI is doing the same thing only via a digital computer file. The MIDI data we use most is 'note on' or 'note off'. The MIDI data itself does not produce any sound. Often, to preview or audition a MIDI file, it is played on a computer sound being on or off. This sound has nothing to do with the operation of an instrument using MIDI data files.

By using magnet driver electronics, the MIDI file operates the action in the instrument. When the magnet is on, the note is on, when the magnet is off, the note is off.

Whether the action in the instrument is being operated by a lever, vacuum, pressure or a magnet, the only difference is the type of storage sending the data to the action in the instrument.

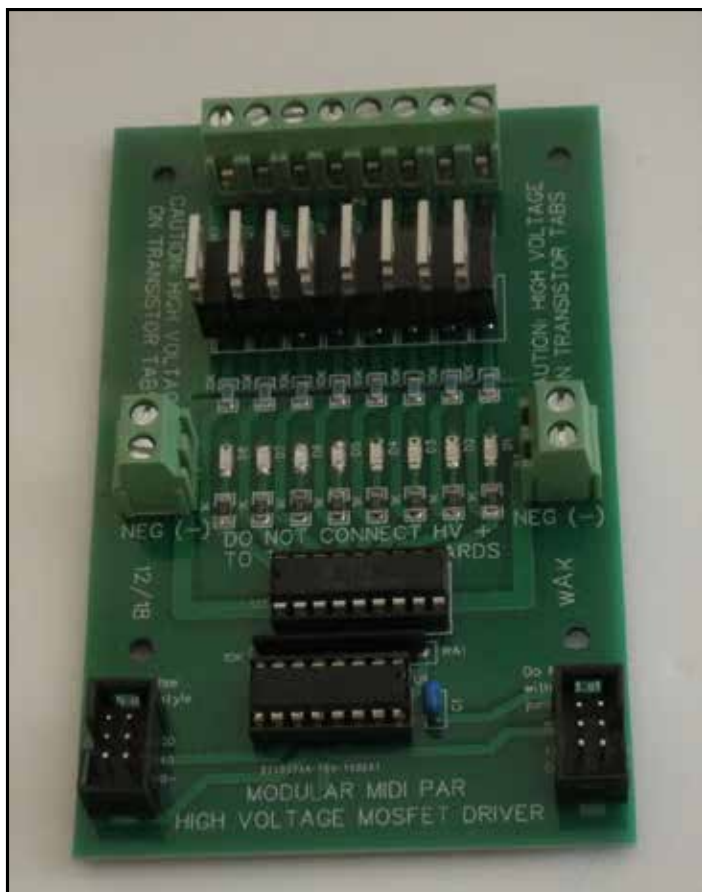
In its most simple description, the MIDI data is 128 notes per channel and there can be up to 16 channels. When the MIDI data is being reproduced on a computer sound card, each of these channels can be assigned a sound. There are 128 sounds available. An example would be a Grand Piano or other instruments. Most often, channel 10 is percussions



*MIDI boards with controller*



*Medium Current boards. Maximum 1.5 A per driver output.*



*High Voltage board. Maximum 200v DC*

and each note is one type of percussion like a bass drum, cymbal or triangle.

In practical use as magnet drivers, each output is assigned to a note and channel. When the MIDI file is sending data, if a note is turned on, a magnet which is hooked to that output on the MIDI driver system will operate. When the MIDI note off is sent from the data file, the magnet goes off.

The MIDI data is slow compared to modern computers. MIDI data is transferred at 31,250 Hz. In addition to note on and note off, the data in a MIDI file stores the channel number and other information we normally do not use when operating mechanical musical instruments.

One of the first commercial MIDI magnet drivers was the Octet system. The Octet boxes could operate up to 128 notes from a MIDI file. They could be configured as an input using key contacts or other mechanical electrical closures to capture the MIDI (note on, note off) data to a file or, as a magnet driver using a MIDI file to operate magnets or solenoids. The basic Octet could be used as a single channel of 128 notes or configured into two partitions each controlling 64 notes. When being used as an output device, the two partitions could be assigned to different MIDI channels.

Over the years, improvements in electronic components and micro-processors have made the hardware much more adaptable to mechanical musical instrument control. Two available MIDI driver system boards can be field

programmed to any note on any channel, in any order. The controller boards can be chained to expand beyond 128 notes or duplicate channels.

Magnet driver systems are available from several sources. A common component of many of the systems is the magnet driver chip. The most common chip (ULN2803) has eight circuits in each package and each circuit is rated at 500 mA of current handling ability. Data sheets suggest though that if more than one output is on at a time, this capability drops considerably. The main reason for this is that all the current is being sent through one pin on the package. This chip pulls the current path to ground. This means that the common to the magnets or solenoids must be DC+.

The system I build was originally posted on a British Busker Organ website. Posted by Wagner Mello, it was designed by him as a single 73 note system to operate an organ he was building. With his help and another engineer, the original 73-note board was expanded to a modular setup.

There are two modular cards that make up a system. The main card is a controller card that has MIDI IN, MIDI Thru and can operate up to 128 notes from each controller card. The controller card has a micro-processor chip to decode the MIDI IN sending the note on, note off data out to magnet driver cards that plug into the controller card. The magnet driver cards are available in 8, 16 and 32 note formats. The controller card can be programmed to decode any note, in any order, on any channel. If more notes or duplicate channels are needed, the MIDI Thru socket can be chained to more controller cards.

The magnet driver cards can be plugged into the controller card in any order. An example might be a Wurlitzer 165 band organ running off one controller and three magnet driver cards. The magnet driver cards would be 2-32 note and 1-8 note card. The format is divided into two channels.

I have been working with MIDI driver circuits for many years and have available circuit boards that will switch higher currents. Most of the domestic builders have been using 12v DC. I have designed and built circuit boards that will operate with either positive or negative common, with a wide range of current and voltages.

Early in 2018, I started working on a modular MIDI capture (encoder) system. With the same thought of a modular system, the controller card can encode or capture up to 128 inputs through modular input cards. The input cards are available in 32 note increments. Each controller card is channel specific. The input can be from open contacts, switches or optical transistors.





*Completed MIDI installation in Wurlitzer style 150 band organ*



*High Current boards. Maximum 5 A per driver output*



*MIDI player*

**About the Author:** William Klinger, became interested in theater organs while in high school. He bought the Barton Theater Organ from the Burleigh Theater in Milwaukee in 1956. After graduating from high school, he joined the Navy and was involved with tuning and maintenance of local organs while stationed in cities around the US. In 1969 he joined the Aeolian-Skinner Organ Co. and worked for them as an installer until they closed in 1973. In 1977 he relocated from Milwaukee, Wisconsin to San Francisco, California to work for Schoenstein Organ Co. as a maintenance technician. After retiring from the Motion Picture and Television industry as a special effects technician in 2005, he relocated to north-central Arkansas.

Always interested in pipe organs, he built a John Smith Busker organ, and larger 20- note organs. Seeing a set of calliope whistles for sale, he built a Tanglely reproduction calliope that is played in local parades. In 2016, he bought a band organ which is currently undergoing some rebuilding in his shop. Information on his products are shown at [www.klingerorgan.com](http://www.klingerorgan.com). email: [billk@pacbell.net](mailto:billk@pacbell.net).



# ARRANGING MUSIC ROLLS THROUGH MIDI

By Mikey Mills

## Complete Guide to MIDI - ARRANGING MUSIC ROLLS THROUGH MIDI

It's a common misconception that arranging music rolls through MIDI is significantly different than the original methods of arranging on a drafting board or hand playing a roll on a marking piano. In truth, the same concepts were simply 'made digital'. Regardless, there are now several steps in arranging that can now be skipped in addition to convenient features in computer programs that make 'making music' easier and less time consuming.

In a program such as Cakewalk, the digital equivalent of a drafting board is appropriately called 'piano roll' format. You can compose notes of different lengths, check for spacing, and add registration and percussion. Rather than using pencil on master paper to mark what will be punched, you use a computer mouse or touch pad on what essentially is a digital master. Bar or measure lines on an original drafting board arrangement had to be hand drawn.

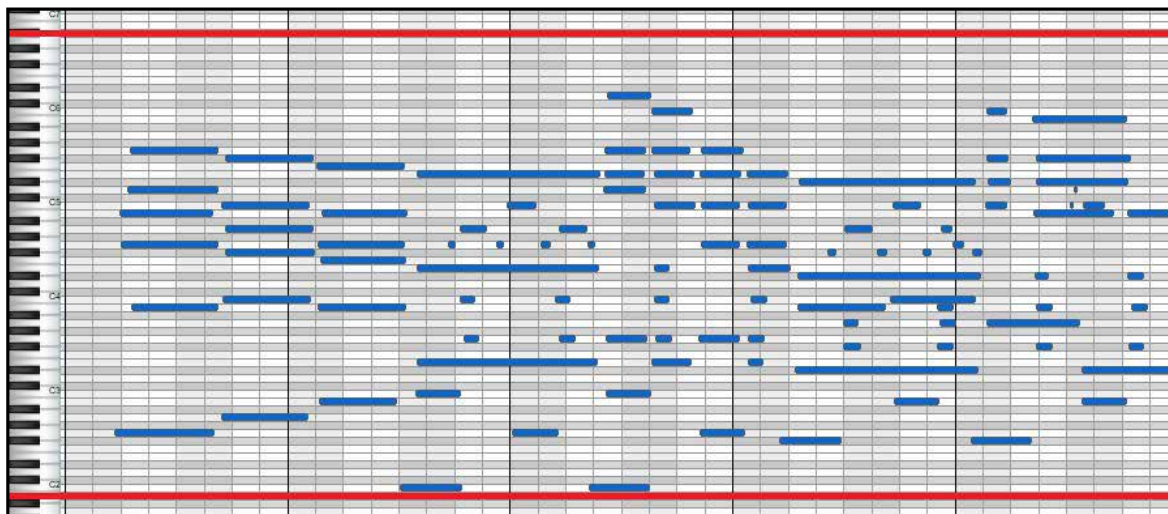
On a computer program, you can simply change the time signature and measures will be automatically generated. With repeated sections, drafting board arrangements were 'marked' by the arranger with the perforator operator manually putting repeats in when cutting a roll from a master. With digital arranging, you simply copy and paste what is being repeated in the computer program.

As for a 'hand played arrangement' done on a marking piano, you simply substitute the 'piano' for a MIDI keyboard and what's being marked for a computer program. When playing a tune into the program, the notes are marked and laid out in the same 'piano roll' format as a 'digital drafting board' arrangement but the notes will naturally not line up with the measures and bar lines. Using an in-program

metronome can help you keep tempo if staying in the bar lines is important and after playing, all notes can be edited, changed, or deleted. Most computer programs will automatically record the dynamics of your playing and if you have a MIDI keyboard compatible damper pedal, it will record that as well. Unfortunately, these controls aren't 'roll compatible' being that they are recorded differently than as 'virtual perforations'. You can, however, use the recorded MIDI controls as a template to easily add roll compatible dynamics and pedal controls in the right spot.

The big advantage to doing an arrangement digitally rather than using the original methods is that you can play back notes, chords, sections, or your work in its entirety at any tempo. In most computer programs standard for arranging music, you even hear a note as it gets placed. If you've ever wondered why a music roll from before 'the digital age' has a mistake... or several, understand that the arrangers of those rolls had no way of easily checking their work. Especially with a non-chromatic orchestration or band organ scale, errors were simply prone to happen.

**About the Author:** Mikey Mills of Cincinnati, Ohio is a young mechanical music enthusiast, collector, and arranger. He has produced new music as well as recut original rolls for a variety of different instruments. Mills is also responsible for [www.mechanicalmusic.org](http://www.mechanicalmusic.org), a website hosting a large quantity of free recordings as well as information and pictures on automatic musical instruments.



*A digital "drafting board" arrangement for an "A" roll nickelodeon in Cakewalk software, piano roll view.*



# USEFUL MIDI PROGRAMS

by Spencer Chase



## Complete Guide to MIDI - USEFUL MIDI PROGRAMS

I have written several utilities for interacting with MIDI devices and files. These have been developed over 20 years or so for my own use as a provider of MIDI e-roll files and to support my e-roll player hardware that I sold for many years. The utilities can save a very large amount of time. I share all these programs for free to anyone who can use them. In order of the most commonly used, here is a list of my most popular programs. All the programs are for Windows PCs, anything from XP to Win 10 will run them. Mac users can usually run them in a virtual environment:

These files are available here: <http://www.spencerserolls.com/Files4Download.html>.

**MIDI Virtual Keyboard.** This is a graphical program that presents a keyboard which is “played” with the computer mouse. You can select from the available MIDI devices. This program is very useful for testing pneumatic and solenoid players. You can send individual notes, repeated notes, held notes etc. The program includes a help file explaining the use.

**MIDI mod2.** There was already a Midimod program so I named mine Midimod2. The main use of this program is to allow the scaling of velocity (loudness) in MIDI files. It works on single files or on batches of files. The user can create and save “presets” that can later be called up to produce the same results. There are also several other options useful for solenoid players such as the Disklavier.

For those who like to have meta data visible for the purpose of making playlists etc, I have a package of two programs called MIDI keyword tools that allows for the management of keyworded text events used for meta data in the files. The program follows a convention established by Warren Trachtman. It gives the files the ability to contain meta data like MP3 tags. All data is held in tabbed text files which can be corrected, edited etc and the whole batch of files updated without having to open individual files. The program

that writes the meta data to the MIDI files is made to be compatible with players such as VanBasco Karaoke Player but the only program that displays the meta data in playlists is the free E-Roll Player that I offer. This was written for my files specifically but will work with any files that have been annotated with the keyword tools.

**Virtual Pianola** is a fun program (mouse version) which allows you to play a MIDI file and modify the dynamics and tempo in Realtime. The program can save the modified files so once you create a masterpiece you can play it back with dynamics.

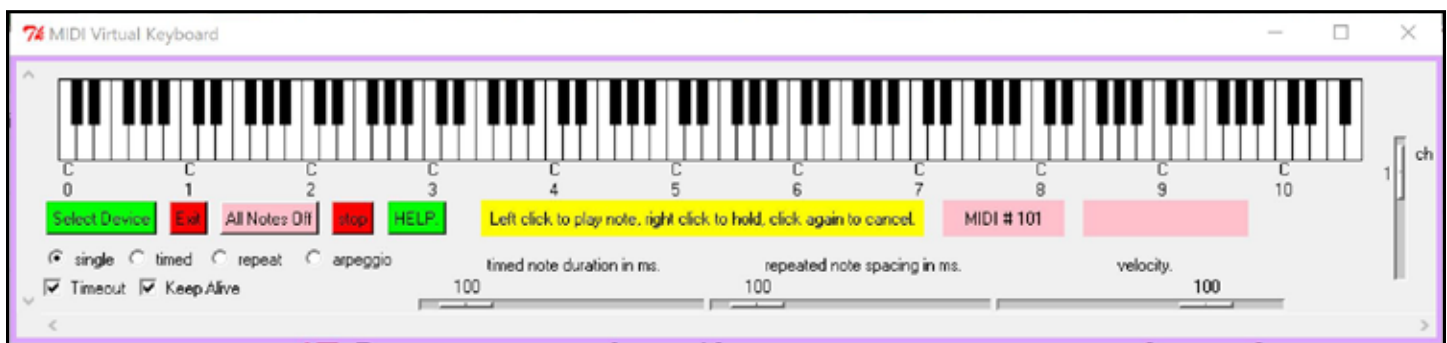
I have several programs for modifying pedal data, converting from on-off to gradual pedaling and the reverse and for shifting the begin and end times of pedal events.

There is a batch of programs that create files for electronically controlled pneumatic players. Standard MIDI files are adapted to play on 88 note or reproducing pianos. Also, programs that convert 88 note files for reproducing pianos.

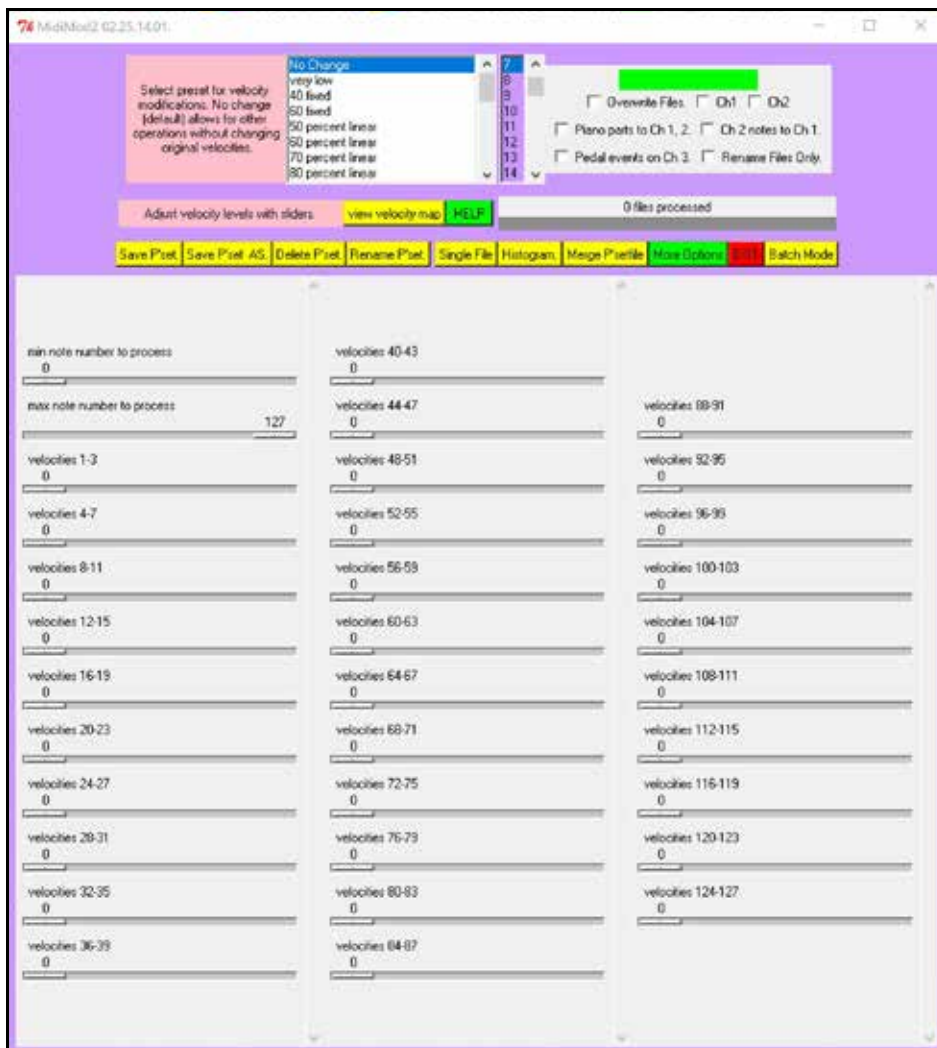
I also have many programs for fixing common problems with MIDI files that might interfere with operation of various players. For example, there are programs to deal with repeated note spacing, too many to mention them all but if you have a problem, let me know what it is and I might have a solution. I have hundreds of programs written over the last 20 or so years to modify, fix and create MIDI files.

A few more programs worth mentioning are remap programs that allow you to apply remapping of notes channels or controllers in batches of files.

**Lyric Adder** allows you to add lyrics to a MIDI file in a much easier way than by adding text in a sequencer program. It takes a while to learn but if you have several files to add lyrics to, it can save a lot of time. Lyrics can be copied from any text source instead of having to type them. Inserting the lyrics is accomplished by clicking the space bar in time with



Screen shot of MIDI Virtual Keyboard



Screen shot of MIDI Mod 2

the musical beat. The program automatically hyphenates common and not so common words using a hyphenation dictionary that I wrote, and which can be customized.

I have also written **Arduino code** for a USB MIDI decoder and offer it open source for anyone wanting to build such a device. There are two versions for use on small devices such as a bottle organ up to 24 notes and a larger version that will work with as many as 128 notes. Since the code is open source you can modify it in any way from simple to very complex modifications of the input MIDI files. The total cost is a lot cheaper than commercial products and obviates the need for a separate USB-MIDI interface as that is built in to the decoder. It is advisable to have small PC boards (also open source) made to minimize wiring but there are options to use ready-made components available very cheaply from China. I will be presenting a workshop demonstrating this at the July, 2019 AMICA meeting in Seattle.

**MIDI 1 to 0 converter.** There are several converters available for anything from free to overpriced. Some are faster than mine although mine only takes a couple of seconds for the average file, so this is not a big deal. The main difference between mine and all other programs is that I copy all the

track names in the type 1 file to text events in the new type 0 file. The reason for this is that many people use the track names in type 1 files to hold metadata such as title composer, performer etc. This is not a proper use of the track names, but it is so common that I decided to save this data instead of throwing it away, as do other programs. I have other utilities for extracting text events to a text file which can be used to create a database and or add more appropriate text events to the files.

There are a lot of files on this page. Be sure to look the whole page over or use your browser's search function to find the file you want. I post the new versions to the web site as time permits but some of the less popular ones might never get updated or fixed on the server. Look about half way down the page for the utilities area. These represent about 5% of the MIDI and text utilities I have written. If you need something to modify MIDI or text files, there is a good chance I have written a program to do it or have one that can be modified. I like helping people to avoid boring repetitive tasks. Feel free to contact me via the contact form if you need something you do not see.

If you are a user of my utilities, they may not be usable on later versions of Windows. Security "improvements" may eventually not allow them to work. If you use these utilities, at some point it may be necessary to use an older operating system or one that is not updated. The programs will always work on XP if you can keep a working copy, or run it in a virtual environment such as Virtual Box. It would be a huge job to convert the programs to work in later versions of Windows. It is also becoming difficult to even modify the programs, but I will continue to do so, if it is possible.

**About the Author:** Spencer Chase is a long-time member of AMICA. He has been scanning piano rolls for approximately 20 years and writing MIDI and other utilities to support playing of piano roll data electronically. His web site is: <http://www.spencerserolls.com/index.html>. Email him at: [spencer@spencerserolls.com](mailto:spencer@spencerserolls.com).





### Part One: An Owner's Report by Brian Wenzinger

About four years ago, I acquired a nice Chickering Ampico grand piano to upgrade our existing Chinese made digital piano. As a collector of other mechanical instruments, any piano we would purchase would need to be a nice sounding reproducer piano. My daughter's piano playing improved quite a bit after switching to a real piano and we enjoyed listening to and collecting Ampico rolls. I love to relax listening to "live" piano music, but I did become somewhat frustrated changing rolls frequently while trying "relax".

About a year ago, my daughter preformed in a piano recital at a Steinway dealer and that's when I first learned about the Steinway Spirio pianos. I was somewhat familiar with the Yamaha player system, mostly by hearing them in hotel lobbies. I was never impressed by the music. After reading many threads on the MMD over the years, I also recalled reading about the Stanhke player system. Many collectors seemed to view the Stanhke system as "the best" electronic piano player system. Once I learned that the Spirio system was based on the Stanhke technology, I began to seriously consider an upgrade to our piano.

The Spirio system is built into the Model M and B Steinway pianos, both with very different price points. After many demonstrations of the player system and a few sessions with my piano playing daughter, we decided to go big and purchase a Spirio Model B piano to replace the Chickering piano. I was able to meet with the VP who oversees the Spirio Technology at Steinway and learned a few interesting facts that helped sell piano. One interesting point was that adding the Spirio line had increased piano sales significantly for Steinway, especially in China.

My purchase decision was mainly based on the following points:

- The piano is an excellent piano to play manually, my daughter loves to play new Steinway pianos.
- The model B is a lovely sounding piano.
- I am confident Steinway will support their player technology forever.
- The player music catalog is free, high quality, and is updated and expanded monthly.
- The piano can play for hours and I don't have to get up to change songs.

The main downside of the piano is the Spirio system is a closed system. You cannot play your own music on the Spirio through the app or record your own performances (a feature of the old digital piano I really liked). All the music comes from Steinway through the Spirio iPad app. The music catalog is large with an emphasis on classical performances but with a

great deal of modern music as well. In my opinion, the song catalog is very diverse and there's a good amount of content for almost any genre and era of music. Of course, most of the tunes are the more popular tunes of any given era or style. I'm not sure there's a great deal of popular music from the glory days of the reproducer piano though.

From my perspective the quality of the music is outstanding. From what I understand, most of the music is recorded from live performances of Steinway artists, many from the top pianists in the world. The overall quality of the piano is very high, and the sound of a Model B is very rich.

The main difference between a Spirio and a traditional reproducer piano is just the ease of use since you don't need to change rolls. By having hours (really days) of music at your finger tips, it's very easy to enjoy the piano for long or short periods. The Spirio app also has the capability to lower the playing volume of the piano. This feature is nice, but it does corrupt the true musical performance. I know my kids rarely played the reproducer for friends. My kids show off the Spirio to their friends, and they always enjoy playing the piano for visitors.

My main advice when considering a purchase is to take lots of time to listen to the Spirio piano and make sure the damper pedal bump doesn't annoy you. Many artists press the damper pedal pretty hard and fast, and in soft passages you can hear the damper thump the strings slightly. I listened to lots of Spirio pianos, they all have this "feature", and some are louder than others. Listening to more than one Spirio is also recommended, as each piano sounds slightly different.

Owning a new piano requires a little more initial maintenance than an older piano. The piano went out of tune quickly, so it needed a bit of regular tuning. The Steinway dealer provided a year of free quarterly tunings to account for the newness of the piano. I've only owned the piano for about a year, so we'll see how well it keeps its tuning after the free tunings end. I suspect since the piano will be used a bit more, it'll need regular tunings during the year.

There are no user groups that I know about.

In the end I have purchased an outstanding piano that plays beautifully with an added benefit of outstanding player technology along with an extensive catalog of music. The entire family is very happy with the purchase. My children rarely "play" the other instruments in my collection, but they do enjoy "playing" the Steinway Spirio. I've been very happy with the purchase and the kids are already fighting over who gets it in the will. I enjoy the piano so much, I've started taking piano lessons again myself!

## Part Two: An Technician's Report by Paul Manganaro

One of my customers is lucky enough to own a Steinway Spirio. I couldn't resist his invitation to audition his recent acquisition. I spent the better part of an afternoon enjoying a Steinway model B grand Spiro. The piano had been tuned a week prior, and so I had the opportunity to hear a model B Steinway sounding its best.

I was eager to spend time comparing the Spirio to pneumatic reproducing pianos, to see how it would measure up against the old technology. Having listened to dozens of freshly restored Ampico's and Duo-Arts from my shop, and from other restorers in the New York/New Jersey area, I thought I'd be a good judge of the Spiro's capabilities. Steinway does not refer to the Spirio as a reproducing piano, but instead they have labeled it a "high resolution" player piano.

After listening to a variety of music on the Spirio, I remembered back to a day from the mid-70s, when the Roehl's had a meeting at their home in Binghamton NY. I was new to the hobby at 19, and totally in awe of their fabulous collection. I started restoring players as my occupation at age 17 and had not yet worked on a reproducing piano. I knew the music was beautiful, but I couldn't judge which system sounded best to my ears.

One of the visitors at the Roehl's that day, a seasoned collector, declared; "Let's settle this once and for all which is better, the Ampico or the Duo-Art". After playing Rhapsody in Blue on both the Roehl's Ampico B and their Duo-Art grand, the collector concluded that the two versions were different and both good in their own way. And that is the conclusion I came to by the end of the day after listening to my customer's Steinway. The Spirio is truly a great bit of engineering that delivers exceptional performances, but it is different from any pneumatic reproducing piano.

You may be familiar with the initial set-up of a reproducing piano after the restoration has been completed. Setting the system to play softly can often lead to compromise. Sometimes the low setting has to do with budget; a case where the piano action is inconsistent, and the low setting must be boosted a bit. Or it could be the roll coding had changed over the many years the system was offered and some rolls have notes that won't sound when other rolls play perfectly. Whatever the reason, sometimes the owner of a reproducing piano must settle on hearing a few notes drop out on soft playing, rather than turning up the lowest volume level of the system. The Spirio can deliver delicate shades of playing with subtle nuances without the fear of dropping notes. I'm sure this is due to a combination of a very sophisticated electronic system, being installed in brand new Steinways, and having a high quality, consistent standard of installation from one piano to the next.

The Spirio can deliver a very high level of expression. Accenting or going from loud to soft seems instantaneous.

Soft playing is whisper quiet, and loud playing is not limited by the solenoids as with other systems. Listening to the system play a demanding classical piece was thrilling. It does sound exactly as if there is an artist at the keyboard, whether you select classical or popular. The Spirio delivers every performance, sounding exactly as if the artist was playing that keyboard.

There are no controls on the piano itself. Every Spirio comes with an iPad tablet. Using blue-tooth technology, all functions are carried out from the tablet or a cell phone. Operating the system is like owning an automatic music machine with a MIDI interface. Individual songs can be selected from the present library of approximately 3,000 titles. Or, the owner can call up preset playlists of their favorite genres, or selections from their preferred artists. The music is split in half, with about fifty percent classical music and fifty percent popular.

The library of music is free, and every month, fifty new selections automatically download to the software. It is refreshing to hear the latest music on a self-playing piano, rather than relying on a library of music that is stuck in time. The software is equipped with a volume control, which compresses the expression from the top down; something retail people have been begging for ever since I've been in the hobby.

I called up a classical piece performed by Rachmaninoff, expecting to hear a reconstituted Ampico roll. But that's not what I heard. Part of the library includes performances from artists who are no longer with us. Zaph, a company which developed software that translates analog recordings to digital, was purchased by Steinway. It's not as easy as pressing a button for the software to make a digital recording with expression from an old 78. It takes human intervention to complete each work. But this software makes it possible for you to hear historic recordings on a real piano. A small number of selections have a video dimension to them. So now, you may be able to watch Horowitz on the video, while listening to him play "live".

So, will you like it? Of course, those of us who enjoy piano music will be thrilled to hear the equivalent of a talented artist, play at the push of a button. I can't imagine a piano enthusiast who wouldn't enjoy hearing the Spirio. The question for members of Amica is: Would you choose the Spiro over your beloved reproducing piano?

The Spirio is geared toward new buyers who want to enjoy "live" music in their homes, just as reproducing piano buyers paid for the state-of-the-art automatic music back in the day. Evidence pointing to the new generation's interest in this remarkable instrument being the most played song on the Spirio at present is "Hello" by Adele.

As stated earlier, Steinway has labeled the Spirio as a "high



resolution” system, instead of calling it a reproducing piano. Whatever the limitations a pneumatic reproducing piano may have, the limitation of the Spirio, is that it does not deliver mechanical music. How many mechanical music collectors limit their roll libraries to music that can only be played by humans? None, I suspect.

Listening to a Spirio is a satisfying experience. To me, listening to arranged, mechanical music at its best is exciting. And for that, you must have a vintage music machine. High-end collectors may end up owning four systems; a Duo-Art, an Ampico, a Welte as well as a Spirio, to encompass the entire library of expressive performances. Most of us will probably enjoy visiting with owners of Spirios.

I expect most sales will be to generations unfamiliar with the term “reproducing piano”. From what I heard in the short time I enjoyed the Spirio, I expect these instruments will sell in great numbers for many years to come.



**About the Author:** Brian Wenzinger lives outside Philadelphia and has been collecting mechanical instruments for 13 years. He's also been involved in the production of new Wurlitzer 150 and G rolls that have sold successfully over the past 10 years. He can be reached via email at [B.WENZINGER@VERIZON.NET](mailto:B.WENZINGER@VERIZON.NET). Paul Manganaro is an Eastern Pennsylvania mechanical music collector and technician. He can be reached at [newmatics@gmail.com](mailto:newmatics@gmail.com)

# MIDI RESOURCE DIRECTORY



This MIDI Resource Directory accompanies each of the three AMICA Bulletin editions with content in the "Complete Guide to MIDI" It will be updated and expanded for each of the three issues as more listings become available and are referenced in the articles in the series.

## Complete Guide to MIDI - Resource Directory

### **Brotech Electronics**

518 Boxwood Drive  
Shirley, NY 11967  
631 834 3244  
[www.brotechelectronics.com](http://www.brotechelectronics.com)

Midi Players: Wireless tablet-controlled MIDI player from SD cards

### **William Klinger**

160 Brookwood LN  
Flippin, AR 72634  
(870) 453-7503 or (870) 404-6312  
<http://klingerorgan.com>  
[info@klingerorgan.com](mailto:info@klingerorgan.com)

MIDI players: File storage from SD cards.  
MIDI magnet driver systems for musical instruments.  
MIDI capture system, real time input to MIDI output.  
Roll and Book scanning service.

### **Stevens Music Machines**

Jeremy Stevens  
464 W Creekside Ln  
Kaysville, UT 84037  
801-510-3495  
[jgstvns@gmail.com](mailto:jgstvns@gmail.com)  
Organ and Orchestration Restoration and Service.  
Specialize in Custom Midi Systems for Roll and Book-Operated Machines.  
Factory Authorized To Install Midi Player Systems in Ramey Encore Banjo and Banjo Orchestra Instruments.

### **Peter Phillips**

26 Alice St.  
Padstow, NSW 2211-Australia  
[Email: peter@petersmidi.com](mailto:peter@petersmidi.com)  
MIDI files for reproducing pianos

### **Mikey Mills**

204 Ridgepointe Dr.  
Cold Spring, KY 41076  
859-620-5863  
[mwmillsmusic@gmail.com](mailto:mwmillsmusic@gmail.com)  
[www.mechanicalmusic.org](http://www.mechanicalmusic.org)

New music rolls for 88 note player pianos, band organs, street organs, nickelodeons.  
MIDI files.

### **Glenn Thomas**

165 Kildee Rd.  
Belle Mead, NJ 08502  
908 431-0490  
[Wurlitzer165@gmail.com](mailto:Wurlitzer165@gmail.com)  
[www.wurlitzer165.net](http://www.wurlitzer165.net)  
MIDI files and music rolls for Wurlitzer 165 band organs

### **Julian Dyer**

5 Richmond Rise  
Wokingham RG41 3XH, UK  
[julian@pianola.fsnet.co.uk](mailto:julian@pianola.fsnet.co.uk)  
[pianorolls.co.uk](http://pianorolls.co.uk)  
Manufacturer of rolls for Duo-Art and 88-note instruments.  
New and recut titles available from catalog or custom-cut to order

### **Spencer Chase**

67550-Bell Springs Rd.  
Garberville, CA 95542  
[Spencer@spencerserolls.com](mailto:Spencer@spencerserolls.com)  
[Spencer@mcn.org](mailto:Spencer@mcn.org)  
<http://www.spencerserolls.com>  
(425) 791-0309  
(707) 223-8212  
MIDI files for reproducing pianos  
MIDI software programs



# Thousands of Parts & Supplies

## FOR SALE



**We have a number of instruments  
for sale — please inquire.**

*Not everything is in parts.*

**Alan Erb  
775-721-4730**

**alanmaryerb@gmail.com**

**Call or email me for more  
descriptions of the huge  
inventory.**

**If you are looking for  
something for an organ or  
orchestration, I may have  
exactly what you need.**

*A partial view of our music room.*







# ONE MARCH / TWO STEP, THREE USES OF IT (WURLITZER GOT ITS MONEY'S WORTH)

By Matthew Caulfield

The well-known march/two-step “Liberty Bell,” by John Phillip Sousa, was first arranged for Wurlitzer’s 165 scale in 1920, probably not by Charles Nilson, Wurlitzer’s star arranger (d. 1924). The 1920 cardboard master, called by Wurlitzer a “stencil,” is still in the Herschell Carrousel Factory Museum, North Tonawanda, N.Y., under the watchful care of Douglas Hershberger, who operates one of the original Wurlitzer perforators to produce Wurlitzer rolls from the museum’s large master roll collection. But it lacks the encircled “C.N” that characterize Nilson’s masters. Arranging guru Mikey Mills says the style is not Nilson’s.

As can be seen from the picture of the master for “Liberty Bell,” much of the history and later uses of the master can be read from knowing what the markings and stampings on it indicate. The tune title, “The Liberty Bell,” is penciled on the master, followed in the next line by the composer’s name, “J.P. Sousa.” Just below and to the right of “Sousa” is penciled “97 f[t]” which is the notation of the number of feet of music in the master. Wurlitzer arrangers were paid by the length of their arrangements.

Characteristically, each master, as rolled up and shelved (as shown in the other picture) is clearly identified by several numbers stamped on successive lines: first a two-digit number indicating roll type (“69” being the number on style 165 stencils), then roll number, and lastly, tune position on roll.

If a master should be reused later for a different roll with a different number and tune position, Wurlitzer was able, because of the thickness of the cardboard used to make masters, to use a razor blade to excise the top layer of

cardboard containing the incorrect digit and re-stamp the master with the correct digit.

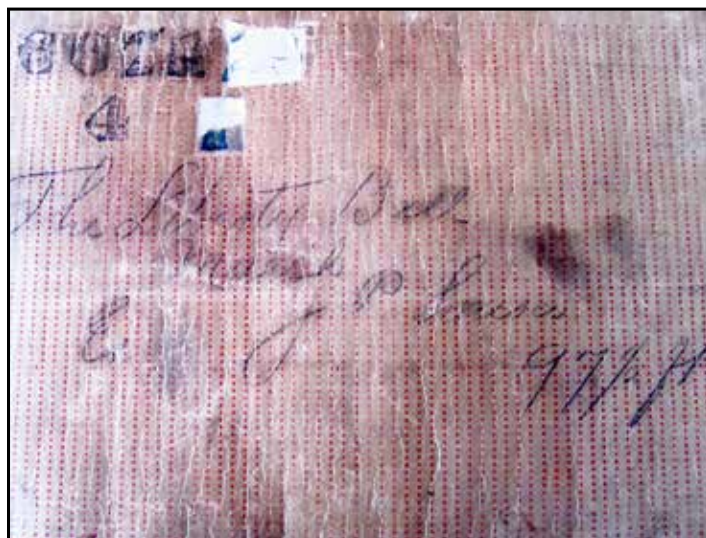
“Liberty Bell” was first used in August 1921 to make tune 2 of roll 6577, where it is listed in Wurlitzer’s Monthly Roll Bulletin as a two-step. The master was reused in October 1921 to make tune 7 on roll 6529, where it is listed in that month’s Bulletin as a march. See the next paragraph for the reason for this confusing numbering and dating, which is Wurlitzer’s fault, not mine.

When the T.R.T. Manufacturing Company decided to reissue the best Wurlitzer tunes as 6-tune rolls (probably in June 1962, judging from Ralph Tussing’s typewritten catalog of those nine rolls dated by its recipient “6/62”), it reused the original Wurlitzer master for “Liberty Bell” to make tune 4 on roll 6671, “March Roll.”

The thing that makes Wurlitzer 165 tune numbering and dating difficult to understand is that from its first style 165 roll, perhaps roll 6501, up until roll numbering had reached about 6570 (in 1921),

Wurlitzer used each roll number only once. But at some point, the company went whacky and decided to perk up sagging roll sales by issuing rolls with different selections on them, which would be numbered again 6501 and up, while continuing its traditional roll numbering system, even though that meant making two rolls with different selections but with identical roll numbers. Duplicate numbers were used for 6501 to 6537.

Examination of these roll pairs reveals that in each case one roll contains tunes popular when the roll was issued—and invariably this roll is the earlier of the two, when it is possible



*Original Wurlitzer 165 band organ master stencil “Liberty Bell,” preserved at the Herschell Carrousel Factory Museum. The enhanced photo on the right shows the detail of the markings on the stencil.*



to date each of the pair. The other roll contains tunes of more lasting popularity, "evergreens" so to speak--and all of those that can be assigned dates were issued after mid-1921, whereas all the popular-tune rolls of the pairs were issued between 1914 and 1918.

What a headache for Wurlitzer's recordkeepers, not to mention for modern roll collectors! And this re-use of roll numbers explains why "Liberty Bell" on roll 6537 appeared in August 1921, while "Liberty Bell" on 6529 appeared

later in October 1921. But all that made little difference to Wurlitzer executives, since their business philosophy was to discourage playing old tunes and to promote buying the newest music. Old rolls were so much waste paper to them.



*Numerous original Wurlitzer stencils showing stamped identifying marks at The Herschell Carrousel Factory Museum*

**About the Author:** Matthew Caulfield is a Wurlitzer band organ roll historian. See his website at: [www.wurlitzer-rolls.com](http://www.wurlitzer-rolls.com). The author has long struggled with dating/numbering problems in creating his Wurlitzer roll catalog, which has finally shed good light on those Wurlitzer problems which perplexed earlier researchers and roll copiers like Play-Rite. Contact him at: [mc707x@gmail.com](mailto:mc707x@gmail.com).



# BRINGING THE PLAYER PIANO TO THE PUBLIC

By Stuart Swanberg



*Stu Swanberg plays as Nicole Robert (Public Program Manager at the museum) looks on*

On Veterans Day, November 11, 2018, the Pacific Can-Am chapter of AMICA put on a public event which brought the player piano to the public. The chapter worked with the Museum of History and Industry in Seattle to make this event a reality, and it was timed to also be a celebration of the 100th anniversary of the ending of World War I. The 1925 Farrand 88 note pumper was provided by the author of this report and seven chapter members brought rolls and sheet music, especially from the WWI era. While we paid to have the piano moved to and from the museum, the museum paid to have it tuned once in place in a busy area on the main floor.

AMICA members were on site from mid-morning to late afternoon interacting with the public and inviting them to pump the piano. Everyone asked so many questions about how the piano could produce so much music with no electricity and how it worked. To assist in explanations, the front of the piano was eventually removed to expose the wind motor and the hammers. We let people play the piano and watching their facial expressions was priceless. They very quickly found out that it took more energy to get more music. Young people and children waited to play, and they were happy to follow instructions on how to make the

piano go. Deven Pierce was a good model for the children as this young automatic music enthusiast was there most of the day along with his mother (see the September/October, 2018 issue of the Bulletin for a Younger Generation article on Deven, page 25). His enthusiasm was contagious to all, and he obviously enjoyed every minute of the many times that he pumped the piano.

At a time when the appreciation of mechanical music seems to be struggling, this kind of event is truly gratifying. Every chapter of AMICA should consider putting on an event such as this one in order to bring automatic music to the public. The payoff and satisfaction that came from this event far exceeded the effort required to make it happen. As people were pumping and singing the words as they went by, one could not help but reflect that this obviously successful event was happening right in the middle of one of the biggest technological centers in this country, Seattle. The player piano was high-tech a hundred years ago and it still is drawing people in. To see how this is happening in this high-tech community, be sure to come to the AMICA convention in Seattle, July 2-7, 2019 (see convention information elsewhere in this Bulletin).





*Deven Pierce at the piano as AMICA members Marc Sachnoff, Stu Swanberg, and Rob Reid show their great approval*



*AMICA member Bob Monsen brought his granddaughter to the event and was she ever happy!*



# 2019 AMICA CONVENTION--SEATTLE

By Carl Dodrill, Convention Chair

You still have time to register for and attend the AMICA convention in Seattle, July 2-7, 2019. Here is the information you need:

## Registration.

The Registration Form for the convention can be found in this copy of the Bulletin. Extra copies can be obtained at <http://www.amica.org/events.htm> by clicking on registration information. You can also get more information about the convention by clicking on previous AMICA Bulletin articles on the website and by viewing an informative video by clicking on the picture of the Space Needle. One basic registration fee (\$440 until May 1; \$484 thereafter) covers everything and there are no other fees unless you add on the preconvention tour or the extra museum tour at the end.

**Hotel accommodations.** Getting to Seattle is easy as it is a single flight from nearly all major US cities. After your free ride from the airport to the hotel, you won't be renting a room at the Doubletree Suites Hotel in Southcenter but rather a suite (two sleeping rooms, one bath) which will accommodate up to four people for the basic rental rate. The cost is only \$129 per night plus tax which is not only good for the convention but also three days before and after. Reserve your suite soon by calling the Doubletree Suites Hotel (206 575-8220), give the Group Code (AMI) and indicate the dates in which you wish to stay.

## Highlights of the convention:

**Schedule—**A detailed day by day schedule for the entire convention can be found in the last issue of the Bulletin (March/April, 2019, pp. 46-47) and on the website. In general terms, the AMICA Board meeting and the pre-convention Seattle city tour will be on Tuesday, July 2, the main part of the convention will be Wednesday July 3 through Saturday July 6, and the Farewell Breakfast and home visits will be on Sunday, July 7.

**Hospitality suite—**There will be a strong emphasis upon the Hospitality Suite during the convention. It is a large room which will accommodate several automatic playing instruments. It will be staffed much of the time, and snacks will frequently be available. You will want to go there again and again to hear music and have great contacts with fellow AMICAns.

Guest artists for the convention are as follows:

- **Marc Sachnoff** is a skilled local AMICAn pianist who will favor us with exciting music in the Hospitality Suite at 8 PM on Tuesday evening. Plan to take this session in.

- **Dennis James** is a well-known theatre organist who has played for AMICA previously. On Wednesday and Thursday evenings at Kenyon Hall, Dennis will be playing theatre organ accompaniment to the full length 1919 silent movie "True Heart Susie" starring Lillian Gish. Dennis will tell about his personal contacts with Lillian as he played for her performances for later in her life. This is a rare chance to hear first-hand what a star of a major silent film was really like, and this one a star 100 years ago!

- **Nathan Bello** is a truly accomplished pianist and has connections with AMICA dating back to 2003 when he was the solo artist of the AMICA convention in Portland. Nathan's training has been highly influenced by mechanical music, he has played for several national conventions, and we are extremely pleased that he is available to perform for us at this convention. Nathan knows what AMICAns like, he is great at providing it, and you will hear him play in the hotel ballroom either Wednesday or Thursday evening having heard Dennis James on the other evening.

- **Morten Gunnar Larsen** is a world-famous ragtime pianist who will be flown in from Norway for his concert on Friday evening. Two special gifts have made his appearance possible. You can expect a dazzling concert on this occasion, and it will be followed by an ice cream social.

## Other convention entertainment:

Other entertainment during the convention will be offered:

- **Magic show.** Local AMICAn Rick Swaney is a very well-studied magician who has been doing magic for most of his life-time. He will perform his truly intriguing magic show for the entire convention on Wednesday afternoon. "How did he do that?" you will say!

- **Radio Enthusiasts of Puget Sound.** On Friday afternoon, this group will do a reenactment of some radio programs from the 1940s for the convention. They will recreate the Fibber McGee and Molly program in which Fibber attempts to tune a piano. Lots of laughs!

- **Cornucopia Concert Band.** This band is directed by local AMICAn Al Rustad, and it has been producing quality music for decades. This will be the dance band for our banquet on Saturday evening.



## Home tours and visits.

- **All day tour.** On Thursday, July 4, buses will load in the morning and each will go to three homes during this day with collections of automatic musical instruments. The homes to be visited are those of David Goodwin and Larry Sanchez, Annie and Dale Tyvand, and Carl and Halie Dodrill. Each collection of instruments is substantially different from every other collection.

- **Open houses.** On Sunday after the Farewell Breakfast, there will be half a dozen homes open for convention attenders to visit, and only one of them is more than 30 miles from the hotel. Most collections are not large, but they are of interest, and this represents a wonderful chance to connect with people having common interests.

## Convention features.

- **Workshops.** We have been able to assemble 10 workshops for Friday morning: Building a Simple MIDI Controller (Spencer Chase); Player Rebuilding Tips and Tricks (Bruce Newman), Popular Music Arranging (Tim Baxter); Creating MIDI Files of Reproducing Piano Rolls (Peter Phillips); Piano Rolls Past, Present, and Future (John McClelland); 3-D Printing (John Grant); Convention Logo Cross Stitch (Liz Barnhart); 3-D Printing (John Grant); The AMPICO in London (Julian Dyer); Encouraging Research/AMICA Website Resources (Terry Smythe); How to Build a Bottle Organ (Phil Dayson, Carl Dodrill).

- **Share Your Expertise.** This is a new feature which will occur at the same time as the more technical workshops. These sessions are designed especially for accompanying persons with interests beyond automatic music, and these moderated sessions provide a chance for people to share their interests with others. Topics such as quilting, favorite recipes, glues, and listening to music (which will be played live) will be included. If you would like to share on a topic, please contact Paul Hempel (617 803-5495; [paulthempel@gmail.com](mailto:paulthempel@gmail.com)) and indicate your interest.

- **Pumper contest.** Yes, we will have the usual contest, this one on Friday afternoon, but we are especially pleased to announce that it will be moderated by Julian Dyer from the UK. You can be sure that this will be an exceptional event.

- **Mart.** This two-hour event will occur on Saturday morning, and this year persons who wish to sell their wares may do so without having to pay for a table.

## Touring and sightseeing.

While the emphasis of this convention is upon music, some opportunities for touring and sightseeing will be offered.

- **Preconvention city tour of Seattle** is available on Tuesday.

- **Museum of Flight.** On Wednesday, following the Welcome Breakfast, we will load buses for the largest private air and space museum in the world. It has an unbelievable number of displays, it hosts the largest K-12 educational program in the world, and you will have several hours to see this amazing place.

- **Optional tours.** On Saturday afternoon, you can choose to be taken to **Downtown Seattle**, to **America's Car Museum** or to the **Museum of Glass**. There will be enough time to go to the Space Needle, to take a harbor tour, or to take in many features of this thriving metropolitan area. Your transportation is provided but you will need to cover the costs of whatever attractions you choose to experience.

**Come to Seattle for a truly enjoyable convention and meet new friends, many of whom you will see at the joint MBSI/AMICA convention next year. Address questions to Carl Dodrill (206 788-7761; [carl@dodrill.net](mailto:carl@dodrill.net)).**





# ANNOUNCING THE 70TH ANNUAL MEETING OF THE MUSICAL BOX SOCIETY INTERNATIONAL ROCKVILLE, MARYLAND AUGUST 27, 2019 TO SEPTEMBER 1, 2019

The 70th Annual meeting of the Musical Box Society International (MBSI) promises to be an unforgettable event. It will be held in the Washington, DC area at the Hilton Rockville hotel. This hotel is 100 steps from the Washington, DC Metro System providing easy access to the museums and other downtown attractions. The rooms are only \$99 per night.

The collector tours will be especially interesting:

**Richard and Cheryl Hack:** The Hacks (in Annapolis, Maryland) have a fabulous collection consisting of a Welte Style 5 Orchestrion, a Decap 92 key Dance Organ, a Bursens Dance Organ, a Mortier 86 key Dance Organ, a Ruth 36 Band Organ, a Hupfeld Phonoliszt Violina, a Mills Violin Virtuoso, a Weber Grandezza Orchestrion, a Wurlitzer CX Orchestrion with added bells, a Seeburg G Orchestrion, a Wurlitzer 153 Band Organ, a Wurlitzer Harp, Scopitone Video Jukeboxes, reproducing pianos, various nickelodeons, jukeboxes and music boxes all in a beautiful Craftsman style environment.

**Durward Center:** Set in Downtown Baltimore, Durward has a beautiful Victorian Hall constructed with meticulous detail. There are wonderful Welte orchestrions, band organs, reproducing pianos and tower clocks.

**Jack and Mildred Hardman:** The Hardman's house in Great Falls, Virginia has a four manual (4/38) Wurlitzer Theater Organ. A concert will be given to showcase this impressive instrument. Additionally, there are nickelodeons, reproducing pianos and a Dutch Street Organ.

**Matt and Beni Jaro:** The Jaro house in Gaithersburg, Maryland, has a Seeburg H orchestrion (with MIDI control), a Seeburg G, two Seeburg K nickelodeons (pipes and xylophone), a Nelson-Wiggen 4X nickelodeon, a Western Electric Mascot nickelodeon, a Wurlitzer 153 Band organ and a Chickering AMPICO reproducing piano. In addition, there is a 35mm motion picture theater and short films will be shown on the tour.



Events at the meeting include a welcome dinner with a keynote speaker, the tours, a movie night, an awards luncheon, an Ice Cream social, a business meeting with a buffet breakfast, a banquet with entertainment, a mart and a great roster of workshops. The theme of the meeting is "It All Began with Ragtime."

For more information go to [mbsi.org](http://mbsi.org) and click on **Calendar of Events**. For registration materials, please contact Jan Bender at [jbzn5063@cox.net](mailto:jbzn5063@cox.net) or Matt Jaro at [mjaro@verizon.net](mailto:mjaro@verizon.net).

**Editor's note:** The Boards of the different mechanical music organizations have agreed to publicize and share some of the events of each organization with members of the others. This mutually benefits the organizations, enhances information, participation, membership, and fellowship. MBSI will also be including a similar note about AMICA's convention in their publication.



# AROUND THE CAROUSEL WORLD



**Editor's note:** This section will offer a platform for authors, contributors, advertisers, service providers, vendors, and anyone else who might have previously sent a submission to CAMN. The same standards of acceptance and editing will apply as The AMICA Bulletin. These contributions will be additional and not substitutes for anything that might have otherwise appeared. We would love to hear from you!

## THE MUSIC TRADES

March 10, 1917.

### HUGE DELIVERY MOTOR-TRUCK FOR AMPICO

Newly Completed Vehicle Will Accommodate Six Uprights or Seven Small Grands—Body Measures 12 x 8 x 8—Average Speed 15 Miles Per Hour

To transport especially and exclusively the Ampico reproducing piano in the metropolitan territory the by various accessories, such as hoisting tackle and other apparatus. The interior walls are heavily padded and



Auto Delivery Truck Specially Built for Transportation of Ampico Reproducing Piano in Metropolitan Territory

monster delivery motor truck shown in the accompanying photograph has just been completed for the American Piano Co. by one of the largest motor-truck manufacturers in the United States. The big vehicle has a carrying capacity of six upright Ampicos and seven Ampico small grands.

It is of 22 hp. and makes an average speed of fifteen miles an hour. The body alone is 12 ft. long, 8 ft. wide and 8 ft. high.

Many of the Ampico deliveries in New York City are effected to purchasers dwelling in the great apartment hotels. A space of 2 ft. forward in the body is taken up

every protection afforded for the beautifully finished surfaces of the instruments.

**Editor's note:** The above Music Trades ad is not connected to the "Carousel World" heading at the top of the page, but simply to use the extra space for an interesting bit of history!



## FOUNDING CHAPTER

**Reporter:** Russ Kriegel

**President:** John Ulrich

**Photographers:** Robert Thomas & Russ Kriegel

Following what has become a tradition, our first meeting of the year was hosted by Bob and Bonnie Gonzalez at their beautiful home in Corte Madera, CA, by the northwest shore of the San Francisco Bay. Cool weather greeted guests on Sunday afternoon, February 18th, who were happy to be warmed by a bowl of Bonnie's homemade vegetable soup. Bob kept attendees entertained by playing tunes on his Weber Duo-Art grand piano, his Coinola C2 orchestrion and his reproduction Seeburg KT special. We were also treated to live performances by Jared DiBartolomeo, who played the Yamaha C-6 Disklavier grand piano, and Gary Schneider who rocked Bob's two manual Conn theater organ with some nightclub standards. Jim Porter shared a video showing the restored theater organ at the newly renovated circa 1920 California theater in Pittsburg, CA.

In our brief business meeting, President John Ulrich thanked our hosts and invited Bob to discuss the instruments in his collection. The schedule for future meetings was delivered, and it was decided to make our November meeting a joint meeting with the Golden Gate chapter of MBSI.

Afterwards, music and conversation continued into the early evening.



*John Ulrich calling our meeting to order*



*Hosts Bob and Bonnie dancing to the musical stylings of Gary Schneider*



*Guests relaxing in the patio*



*Left to right, Richard Reutlinger, Carl Zwanzig, Bonnie Gonzalez*



*Pianist Jared DiBartolomeo performing at the Yamaha Disklavier*



# NORTHERN LIGHTS CHAPTER

**Reporter:** Susan and John Ellingson

**President:** Paul Watkins



Randy Hammond was the host of another wonderful Amica event with music, fun and conversation. We brought our sweethearts and our love-themed music rolls to share. We listened to Randy's great piano collection, including the Mason & Hamlin Ampico, Fischer Ampico, Steinway Duo Art upright, and 1914 Cable Euphonia. Plus, the nice Regina 15 1/2" music box, antique phonographs and his home is a bit of a time warp itself with beautiful antiques.

Our dinner was served on some of Randy's collection of beautiful china, glass and silver. The main course was a delicious ham and creamy cheesy potatoes with Wheaties on top, Randy's specialty, along with a table of side dishes and desserts brought by the other members.

Paul Watkins, our current president, couldn't attend the event. Don Barton, vice president, and Gary Goldsmith, treasurer, directed a brief member meeting to review the Chapter's insights for the future and upcoming events. We started the meeting by introducing ourselves and what our interests and specialties are. It was particularly interesting to hear about the new ventures taken on by members and as a reminder of the resources available to each of us.



*John Ellingson, Howie O'Neill, Don Barton, Alex Stolitza, with Randy Hammond busy working on the table*



*JS Fuchter, Gay Goldsmith, Tim Wheat*



*? Back row: Alex Stolitza, Dave Bjork, Ron Olson; Front row: Howie O'Neill, and Don Barton*





*Host: Randy Hammond*



*Don Barton and Jon Poupore*



*Jerrilynn Boehland*



*Phillip Baird, JS Futch, and Gary Goldsmith*



# PACIFIC CAN-AM CHAPTER

**Reporter & Photographer:** Carl Dodrill

**President:** Stu Swanberg



On February 24, our chapter went to the home of Allan and Nancy Rustad on the north side of Seattle. The meeting was so enjoyable that people lingered around longer than usual, engaged in pleasant conversation and in hearing the automatic instruments. Al and Nancy have been collectors for many years. Nancy has been a voice teacher through the years and Al has led a concert band for decades. This is the Cornucopia Concert Band and in fact it will be the dance band for the banquet at the Seattle AMICA convention which will take place in Seattle July 2-7, 2019. See the article about this convention elsewhere in this issue of the Bulletin.

After an extended period of visiting with one another, hearing the instruments and seeing a prize 1929 Lincoln limousine in the garage, President Stu Swanberg called our business meeting to order. As the AMICA convention in Seattle is now only a little more than four months away, it was the focus of attention. Carl Dodrill, Convention Chair reported on the status of several important aspects of this event. The Convention Committee of 13 people has been active in the pursuit of making the convention truly outstanding. For example, there are four major guest artists who will be performing including Marc Sachnoff, Dennis James, Nathan Bello, and Morten Larsen (who will be brought to Seattle from Norway for this convention). Ten workshops have been



*Conversation and delicious food were enjoyed by all*

finalized on a variety of topics of interest to AMICAns and there will be Share Your Expertise sessions on non-technical topics as well. Many volunteers will be used to make all this happen, and Halie Dodrill as Volunteer Coordinator reported on the positions already filled and on the places where additional volunteer help is needed.

Annie Tyvand introduced Rick Swaney because he will fill the last piece of the convention schedule. Rick has a fine collection of musical instruments, and he is a member both of AMICA and MBSI. Further, he has been a magician since early in life and he has agreed to put on a magic show as part of the convention. Merely to demonstrate some of his skills, he performed several tricks for the group. People were uniformly impressed, and everyone agreed that this will be a fine addition to the convention.

The Rustads have a dining room with a marvelous view out over Puget Sound, and this is where an especially delicious potluck dinner took place. People ate while watching the large ferries go back and forth, carrying people and cars to various places in the area. When more than enough food had been consumed, people lingered at the table, enjoying most pleasant conversations.



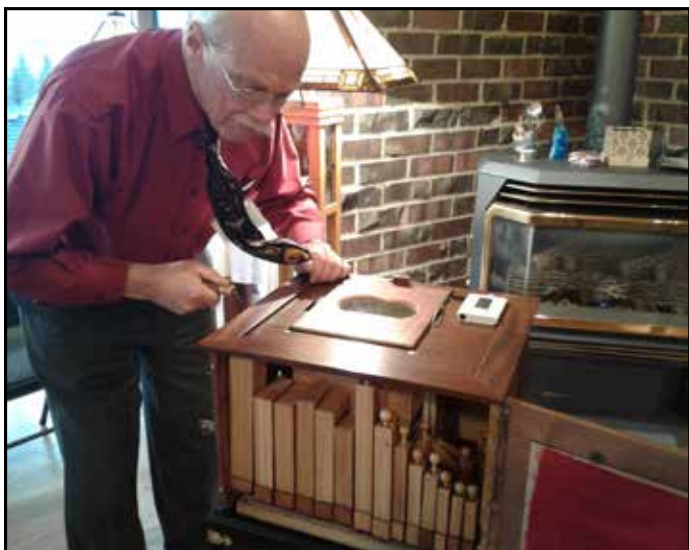
*Our hosts Allan and Nancy Rustad*



*Stu Swanberg and Michael Metcalfe spend time with Al Rustad examining Al's 1929 Lincoln*



*Rick Swaney demonstrates his magical skills*



*Rick Swaney demonstrates his magical skills*



*Vice President Rob Reid tests out a Steinway Duo-Art*



# ADVERTISING

## GENERAL INFORMATION ABOUT ALL ADVERTISING IN THE AMICA BULLETIN

All advertising should be directed to:

Glenn Thomas  
165 Kildee Rd.  
Belle Mead, NJ 08502  
Phone: 908-431-0490  
e-mail: [Wurlitzer165@gmail.com](mailto:Wurlitzer165@gmail.com)

Ad copy must contain text directly related to the product/service being offered. Extraneous text will be deleted at the Editor's discretion. Advertisers will be invoiced, with payment to AMICA Treasurer. Telephone ads will not be accepted due to high risk of errors. AMICA reserves the right to edit or to reject any ad deemed inappropriate or not in keeping with AMICA's goals and objectives.

The **BULLETIN** accepts advertising without endorsement, implied or otherwise, of the products or services being offered. Publication of business advertising in no way implies AMICA's endorsement of any commercial operation.

**AMICA PUBLICATIONS RESERVES THE RIGHT TO ACCEPT, REJECT, OR EDIT ANY AND ALL SUBMITTED ARTICLES AND ADVERTISING.**

All items for publication must be submitted directly to the Editor for consideration.

### CLASSIFIED AD RATES FOR AMICA MEMBERS:

1-100 Words ..... \$20.00

Non-member rates are double for all advertising.

### DISPLAY ADVERTISING

Double Page ..... \$200.00

Full Page ..... \$150.00

Half Page ..... \$ 75.00

Quarter Page ..... \$ 50.00

Business Card ..... \$ 30.00

Non-member rates are double for all advertising.

**Special 6 for 5 Ad Offer** - Place any ad, with no changes, for a full year (6 issues), and pay for only 5 issues. Payable in advance.

Photographs or halftones \$15.00 each

Loose Sheet or Insert Advertising: Inquire

Display advertisers supply camera-ready copy. Copy that is oversized or undersized will be changed to correct size. We ordinarily do not prepare advertisements from raw content.

**PAYMENT:** Advertisers will be invoiced. Make check payable to **AMICA INTERNATIONAL**. Typesetting and layout size alterations will be billed if required by professional service.

**DEADLINES:** Submissions must be received no later than the first of the odd months (January, March, May, July, September, November). The *Bulletin* will be mailed no later than the first week of the even months.

can help. Please contact me:

Jason Bitkowski 4489 Cherry Hill Dr, Orchard Lake, MI 48323 Phone: 248-891-7181, Email: [Jabdo@aol.com](mailto:Jabdo@aol.com) (3-19)

**1928 WEBER 6'4" DUO ART.** Art case double leg walnut Louis XVI, Serial No. 80118, with original ivory keys, player mechanism restored 20 years ago but still plays well. \$8,500 OBO. Donald Huene, 7429 N. Valentine, Fresno, CA 93721. (559) 431-1639; [yosemf@aol.com](mailto:yosemf@aol.com). (4-19)

**REGINA CURVED GLASS 15.5 INCH 12 DISC CHANGER** with extra discs; **OLYMPIA SINGLE DISC PLAYER** with extra discs, and **OTHER ITEMS.** 91-year-old must sell collection. Videos available. John Johnson, Albuquerque, NM, 505-263-2210. [jjohn12@comcast.net](mailto:jjohn12@comcast.net)

**1} Howard upright** converted into a nickelodeon leaded glass panels in top panel and bottom panel, case refinished, new keyboard, takes 25 cent coins, comes with rolls containing 10 to 14 songs with all kinds of songs, with lights top and bottom, plays excellent, \$ 4000. 203-544-8750.

**2) Rand Company** nickelodeon, equipped with a set of pipes, oak case, came out of Speakeasy in New York, needs total restoration, \$1500. Lieuwe de Haas; 203-544-8750

## CLASSIFIED ADVERTISING

**WURLITZER BAND ORGAN STYLE 150 AND 165 ROLLS.** Newly arranged rolls just released. Great selection of contemporary and traditional music by talented arrangers! New recuts of original Wurlitzer rolls not previously available. Duplicates of older rolls available. Glenn Thomas: 165 Kildee Rd; Belle Mead, NJ 08502; 908 431-0490; [wurlitzer165@gmail.com](mailto:wurlitzer165@gmail.com) (6-18)

**WANTED: Steinway Art Case Duo Art "XR" or "OR" Reproducing Piano.** Seeking one of my long last desires. It's going to a great home. Please contact me should you have a Steinway Duo Art player piano ART CASE for sale or know of one. I am looking for the carved fancy cases not simple straight wood style. I would like it to have the matching bench and ivory keys. In excellent working order and condition would be ideal but open to discussion. Distance is not an issue as shippers

## Ben's Player Piano Service

*Repair and restoration of air powered mechanical music devices of all description.*

*Player pianos*

*Reproducing pianos*

*Dance organs*

*Fairground organs*

*Nickelodeon pianos*



*Original historically  
Correct techniques  
And materials used  
Throughout in the  
Rebuilding process.*

*Benjamin R. Gottfried*

*464 Dugan Road, Richfield Springs NY 13439*

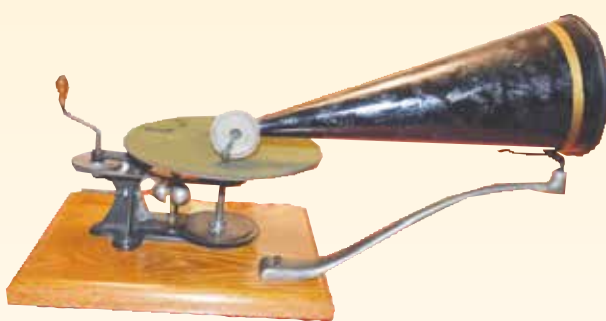
*Bensplayerservice.com 315-858-2164*

(1-20)

# Stanton's Upcoming Music Machine Auction

To be held on the Barry County Fairgrounds, at 1350 M-37 Highway, Hastings, Michigan on:  
**Thursday, Friday & Saturday, April 25, 26 & 27, 2019**

Accepting quality collections and specialized items for our Spring Event. Music Boxes, Band organs, Phonographs, roller organs, records and other fine examples of automatic music machines. Already included are 3 excellent Band organs including a North Tonawanda Model 182, Wurlitzer Model 146A, and a smaller Wurlitzer unit, phonographs including Edison Operas, Eldridge R. Johnson hand cranked toy phonograph with original disc recording, "For the Children", Excellent music boxes, fine Herzog and Salter record cabinets and lots more.



## Stanton's Auctioneers, Appraisers, & Realtors

144 S. Main, P.O. Box 146  
 Vermontville, MI 49096  
 Phone: (517) 726-0181  
 Fax: (517) 726-0060  
 E-mail: [stantonsauctions@sbcglobal.net](mailto:stantonsauctions@sbcglobal.net)  
 Website: [www.stantons-auctions.com](http://www.stantons-auctions.com)



**Steven E. Stanton**  
 (517) 331-8150 cellular  
 (517) 852-0627 evening  
 E-mail – [stevenEstanton@gmail.com](mailto:stevenEstanton@gmail.com)

**Michael C. Bleisch**  
 (517) 231-0868 cellular  
 E-mail – [mcbleich@gmail.com](mailto:mcbleich@gmail.com)



# Mechanical Music Restoration and Resource Registry



*The AMICA Bulletin is pleased to offer this complimentary resource for anyone looking for someone to repair, rebuild, or restore their mechanical music; provide resources, material, and supplies, or general assistance in any way for anything that qualifies under AMICA's broad definition of mechanical music. Listings will be by state, without regard for type of service or resource.*

*Submissions may be made by the resource provider, AMICA member, or anyone else. To provide the broadest possible array of listings, AMICA membership is not required but encouraged. Before publishing any listing, The AMICA Bulletin will confirm with the provider the interest and accuracy of the listing. Beyond verification of the listing, there is no implication of the quality, voracity, or integrity of the service provider. AMICA's resource serves only to provide a forum bringing together interested parties who will make their own connections and arrangements. AMICA takes no responsibility for the communication, service, or other arrangements between the parties. Listings with all complete information should be sent to Bulletin editor, Glenn Thomas*

## **ARKANSAS**

### **William Klinger**

160 Brookwood LN  
Flippin, AR 72634  
(870) 453-7503 or (870) 404-6312

<http://klingerorgan.com>  
[info@klingerorgan.com](mailto:info@klingerorgan.com)

**MIDI players: File storage from SD cards. MIDI magnet driver systems for musical instruments. MIDI capture system, real time input to MIDI output. Roll and Book scanning service.**

## **CALIFORNIA**

### **Alan Erb**

1783 Carson River Rd.  
Carson City, NV  
775-721-4730

[alanmaryerb@gmail.com](mailto:alanmaryerb@gmail.com)

*Repair, restoration, parts, and materials, instruments, music, and a vast parts supply*

### **Bob Caletti**

605 Wallea Dr.  
Menlo Park, CA 94025  
650-325-3898

[info@musicboxrestorations.com](mailto:info@musicboxrestorations.com)

[www.musicboxrestorations.com](http://www.musicboxrestorations.com)

*Restoration of antique Music Boxes  
Complete restoration of mechanism and case 34 years' experience*

### **David Dewey**

650 Hurleton Road  
Oroville, CA 95966  
530-589-3676

[djdewey@cncnet.com](mailto:djdewey@cncnet.com)

*Piano Tuning (RPT)*

*Pneumatic player restoration and repair.*

## **KENTUCKY**

### **Mikey Mills**

204 Ridgepointe Dr.  
Cold Spring, KY, 41076  
859-620-5863

[mwmillsmusic@gmail.com](mailto:mwmillsmusic@gmail.com)

[www.mechanicalmusic.org](http://www.mechanicalmusic.org)

*New music rolls for 88 note player pianos,*

*band organs, street organs, as well as nickelodeons. Free midi files for various instruments as well as information, music, and other free resources are additionally available on the above website.*

## **MASSACHUSETTS**

### **Louis A. Gentile Piano Service**

96 Federal Ave.  
Quincy Ma. 02169  
617-471-2494

[gentilepiano@yahoo.com](mailto:gentilepiano@yahoo.com)

[www.gentilepiano.com](http://www.gentilepiano.com)

*Piano, and Player piano tuning, restoration, repair, sales, and service for over 35 years.*

*Large inventory of salvaged action, cabinet, and mechanical parts, for player and reproducing pianos.*

*Please check the website for details.*

## **MINNESOTA**

### **Nate Otto**

Rum River Restoration  
624 Johnson St  
Anoka, MN 55303  
612.508.9418

[nate@rumriverrestoration.com](mailto:nate@rumriverrestoration.com)

[rumriverrestoration.com](http://rumriverrestoration.com)

**Offering repairs and restoration of pneumatic player pianos, nickelodeons, pump organs and roller organs, inside and out.**

## **OHIO**

### **D.C. Ramey Piano Company, LLC**

17768 Woodview Drive, Marysville OH  
43040  
708 602-3961

[dcramey@dcramey.com](mailto:dcramey@dcramey.com)

[dcramey.com](http://dcramey.com)

*Professional restoration services of automatic musical instruments for over 50 years. Repair services as well as a variety of restoration parts and supplies. New and vintage instruments along with music rolls in many formats including: A, 4X and G, H, M, and O.*

## **NEW JERSEY**

### **Glenn Thomas**

165 Kildee Rd.  
Belle Mead, NJ 08502  
908 431-0490

[Wurlitzer165@gmail.com](mailto:Wurlitzer165@gmail.com)

[www.Nickelodeonhouse.net](http://www.Nickelodeonhouse.net)

*Wurlitzer 150 and 165 band organ rolls. New music and recuts. Wurlitzer Automatic Player Piano (APP) rolls. New music*

### **Alan Lightcap**

P.O. Box 173  
Lambertville, NJ 08530-0173  
(609) 397-1758

[aampico@aol.com](mailto:aampico@aol.com)

*Since 1963, professional repair and restoration of pneumatic musical instruments from player and reproducing pianos to American and European orchestrions in private collections and museums.*

## **NEW YORK**

### **Benjamin R. Gottfried**

Ben's Player Piano Service  
464 Dugan Road  
Richfield Springs, NY 13439  
315-717-5969

[www.bensplayerservice.com](http://www.bensplayerservice.com)

### **Bob Yorburg**

3586 Gomer St.  
Yorktown Heights, NY 10598  
914-522-6800

[magicarve@gmail.com](mailto:magicarve@gmail.com)

[www.bobyorburg.com](http://www.bobyorburg.com)

*Wood Carving. New carvings and restorations. Complete facades and missing piece replacement. Lettering*

## **OREGON**

**Bruce Newman**

**Newman Restorations**

36475 US Hwy 101

Suite 1358

Gold Beach, OR 97444-1358

Cell: 541-698-0669

[orchestrelle@gmail.com](mailto:orchestrelle@gmail.com)

[NewmanRestorations.com](http://NewmanRestorations.com)

*YouTube Channel: DuoArtOrgan*

Newman Restorations is a full-service shop rebuilding all types of pneumatic self-playing instruments including player pianos, reproducing pianos, orchestrions, player reed and pipe organs as well as band organs. We build new components such as percussion units, xylophones and pipe chests. We specialize in building quality organ pipes for your orchestrion or band organ as well as restoration of vintage pipes.

## **PENNSYLVANIA**

**Keystone Music Rolls**

P.O. Box 650

Bethlehem, PA18016

[keymusic@ptd.net](mailto:keymusic@ptd.net)

[www.keystonemusicrolls.com](http://www.keystonemusicrolls.com)

Ampico, Duo-Art, and 88-note recut rolls

**Joe Osborne**

Osborne and Everett Antique Keyboard Restoration

155 Shughart Rd.

Carlisle, PA 17015

717-448-7555; 717-669-5648

[www.osbornej.com](http://www.osbornej.com)

[keyboards@osbornej.com](mailto:keyboards@osbornej.com)

Ampico, Duo-Art Reproducers

Seeburg & Wurlitzer Nickelodeons

Pump Organs, Melodeons, Harpsichords.

## **SOUTH CAROLINA**

**Roger Dayton - Pedals Pumpers & Rolls**

Greenville, South Carolina

864-238-2677

[www.pedalspumpersrolls.com](http://www.pedalspumpersrolls.com)

Complete restoration of 88 note players, reproducing grands and uprights, nickelodeons, pump organs and band organs - to include refinishing, restringing, action work and professional player mechanism rebuilding. Full time for 45 years of experience at your service.

## **TEXAS**

**Robert Stewart**

Denton, Texas

417-298-2463

[rstewart0065@gmail.com](mailto:rstewart0065@gmail.com)

Restoration and repair since 1973 of classic 88 note and reproducing pianos

## **VIRGINIA**

**Larry Norman**

340 Tracy Drive

Moneta, VA 24121-3416

540-721-7188

[rollertunes@earthlink.net](mailto:rollertunes@earthlink.net)

[www.home.earthlink.net/~rollertunes](http://www.home.earthlink.net/~rollertunes)

Piano roll auctions

## **CANADA**

**Steve Bentley**

North Vancouver, BC, Canada

604 980-5160

[rollmax@live.ca](mailto:rollmax@live.ca)

"Six "O" rolls of the SB-Series available from Play-Rite Music Rolls Inc. Selection of ragtime, marches, tangos, and popular tunes of the early 20th. century. A list of which can be available through my e-mail address."

**Ingmar Krause**

Surrey, BC, Canada

604 339-5836

<http://www.grindorgans.com>

[organ@grindorgans.com](mailto:organ@grindorgans.com)

Restoration of variety of mechanical music devices, excl. stringed instruments: re-leathering of bellows; trouble-shooting; "un-doing" of botched previous restoration attempts; adjustments; tuning; custom arranging of music rolls (mostly 20 note) as well as discs (Ariston 24 key); re-finishing of casework (inlays etc.); free consultations; import of new European street organs, all manufacturers, predominantly German/Austrian

**Ron Schmuck**

**The Great Canadian Nickelodeon Co. Ltd.**

RR#4, 1 Minto Pines Rd.

Mount Forest, Ont, N0G 2L0

Phone 519 261 0154

[www.nickelodeonco.com](http://www.nickelodeonco.com)

[nickelodeonco@gmail.com](mailto:nickelodeonco@gmail.com)

Restorers of all mechanical musical instruments. Players, Reproducers, Nickelodeon's, Orchestrions Dance and fair organs, Band Organs etc.

Specializing in European Orchestrions and Custom MIDI systems built and installed.

Representatives for Nederlands Bockorgel Centrum, Netherlands (Restorers and builders of new Street and Dance organs) Over 45 years of worldwide service.

## **UNITED KINGDOM**

**Julian Dyer**

5 Richmond Rise

Wokingham RG41 3XH, UK

[julian@pianola.fsnet.co.uk](mailto:julian@pianola.fsnet.co.uk)

[pianorolls.co.uk](http://pianorolls.co.uk)

Manufacturer of rolls for Duo-Art and 88-note instruments. New and recut titles available from catalog or custom-cut to order.



# The Campaign of National Advertising for the

## AMPICO



*Mengelberg, Rachmaninoff and Levitzki  
hearing their recordings in the Ampico Studios*

*THE* great musicians, recognizing the absolute perfection of the Ampico, take the keenest interest in being audience to their own playing—for only through the Ampico may they hear themselves as others hear them. And only through this supreme instrument may you, in your home, hear the recordings of Levitzki, Mirovitch, Moiseiwitsch, Ornstein, the great Rachmaninoff—for these, and many other masters of present-day fame and brilliant future, record exclusively for the Ampico.

*Impossible to describe—the Ampico must be heard*

*There is but one Ampico—Easily identified—Obtainable only in these pianos:*

	KNABE	CHICKERING
Fischer	Franklin	Haines Bros.
		Marshall & Wendell

For Canadian Distribution, also in the Willis Piano

### AMERICAN PIANO COMPANY

437 Fifth Avenue

New York City

*Largest Manufacturers in the World—of Pianos of the Highest Grade*

The Sixth of the pages in full color to appear in the November Magazines





**Station-type Musical Theatre, c. 1890**  
**Estimate:** 12,000–18,000 € /  
 \$ 13,700–20,500



**Lifesized Leopard Automaton by J.A.F., circa 1930**  
**Estimate:** 2,500–3,000 € /  
 \$2,850–3,400



**'Girl on the Telephone' Musical Automaton by Renou, c. 1900**  
**Estimate:** 6,000–8,000 € /  
 \$6,800–9,100

## 150<sup>th</sup> Specialty Auction »Mechanical Music & Technical Antiques«

18 May 2019



**Rock Ola Tempo I Jukebox, 1959**  
**Estimate:** 7,000–9,000 € /  
 \$ 8,000–10,250



**Orchestral Cylinder Musical Box, c. 1890**  
**Estimate:** 8,000–12,000 € / \$ 9,100–13,700



**Regina Style 33 Automatic Disc-Changing Musical Box, c. 1900**  
**Estimate:** 22,000–25,000 € /  
 \$ 25,000–28,500



**Automaton Chef by Gustave Vichy, c. 1890**  
**Estimate:** 7,000–9,000 € /  
 \$ 8,000–10,250



**Singing Bird Box by A. Leschot, c. 1870**  
**Estimate:** 5,000–6,000 € /  
 \$ 5,700–6,850



**Contemporary Musical Automaton Portrait "Putin Ecrivain" by Christian Bailly**  
**Estimate:** 20,000–25,000 € /  
 \$ 23,000–28,000



**Automaton Banjo Player by Vichy, c. 1900**  
**Estimate:** 5,000–8,000 € /  
 \$ 5,700–9,100



**Symphonion Musical Hall Clock, c. 1899**  
**Estimate:** 5,000–7,000 € /  
 \$ 5,700–8,000

**...and many more!**

For more highlights and videos, visit [www.Breker.com/New Highlights](http://www.Breker.com/New_Highlights)  
 or [youtube.com/auctionteambreker](http://youtube.com/auctionteambreker)

Fully-illustrated bilingual (Engl.-German) COLOUR Catalogue available against prepayment only:  
 Euro 28.– (Europe) or elsewhere Euro 37.– (approx. US\$ 44.– / Overseas)  
 (Bank draft, cash or by Credit Card with CVV and expiry date: MasterCard/Visa/AmEx)

Consignments for Future Auctions Always Welcome!

**AUCTION TEAM BREKER**

– The Specialists in »Technical Antiques« –

P. O. Box 50 11 19, 50971 Koeln/Germany · Tel.: +49 / 2236 / 38 43 40 · Fax: +49 / 2236 / 38 43 430  
 Otto-Hahn-Str. 10, 50997 Koeln (Godorf)/Germany

e-mail: [Auction@Breker.com](mailto:Auction@Breker.com) · [www.breker.com](http://www.breker.com) · Business Hours: Tue – Fri 9 am – 5 pm

**PLEASE FEEL FREE TO CONTACT OUR INTERNATIONAL REPRESENTATIVES:**

U.S.A.: Andrew Truman, Tel. (207) 485 8343 \* [Andrew.AuctionTeamBreker@gmail.com](mailto:Andrew.AuctionTeamBreker@gmail.com)

Australia & New Zealand: P. Bardenheier, (NZ), Tel./Fax (+64) (0)9 817 72 68 \* [dbarden@orcon.net.nz](mailto:dbarden@orcon.net.nz)

Japan: Murakami Taizou, Tel./Fax (06) 68 45 86 28 \* [murakami@ops.dti.ne.jp](mailto:murakami@ops.dti.ne.jp) · China: Jiang Feng, Tel. 138 620 620 75 \* [jiangfengde@gmail.com](mailto:jiangfengde@gmail.com)

Hong Kong, Taiwan, Singapore: Alex Shih-Chieh Lin, (HK), Tel. (+852) 94 90 41 13 \* [alexscilin@gmail.com](mailto:alexscilin@gmail.com)

England: Tel. (0)777 963 7317 \* [AuctionTeamBrekerUK@outlook.de](mailto:AuctionTeamBrekerUK@outlook.de) · France: Pierre J. Bickart, Tel. (01) 43 33 86 71 \* [AuctionTeamKoln@aol.com](mailto:AuctionTeamKoln@aol.com)

Russia: Maksim Suravegin, Tel. +7 903 558 02 50 \* [Maksim-ATB.ru@gmx.net](mailto:Maksim-ATB.ru@gmx.net)

liveauctioneers

invaluable  
 The world's premier auctions and galleries