THE ACOUSTICAL CONSULTANT

The Effects of Ear Design on Pipe Performance

by R. J. Weisenberger

In previous articles I have briefly mentioned some of the effects ears have on pipe performance. I will now give this aspect of pipe design the attention it deserves.

Ears, if properly sized and positioned, will produce the following effects on the performance of open cylindrical flue pipes:

A. The operating pressure range will be doubled.

B. The acoustical power will be quadrupled (+6 db).

C. The harmonic development will be extended, as the pipe will stay in its fundamental mode at higher pressures before overblowing to its harmonic.

The above conditions will result when using ears, each the size of the mouth, with their tops bordering on the upper lip (see figures 1A and 1B). The use of ears larger than the mouth will do little more than flatten the tone, while the use of smaller ears will produce results similar to those above, but to a lesser degree. Like-

wise, if the ears are positioned differently, their effect will be lessened.

Thus, for high pressure and low pressure pipes of a given scale to be tonally similar, *all* of the above conditions must be met.

The use of a harmonic bridge between the ears takes the above process a step further, by permitting the pipe to operate with stability at pressures up to double that obtained by adding ears alone. Naturally, for pipes using a harmonic bridge, the ears must be larger than normal to accommodate the bridge. For a harmonic bridge to give optimum results, it should be of the same dimensions as the mouth and carefully positioned for a stable fundamental tone (see figures 2A and 2B). If the harmonic bridge is either too small or too large, proper voicing will be difficult, if not impossible.

Tests can be used to verify that high pressure pipework designed in this manner will possess a roughly equal amount of harmonic development as similarly-scaled low pressure pipe-

FIG. 1A

FIG. 1B

FIG. 2A

FIG. 2B

High

pressure

flue

FIG. 2A

FIG. 2B

Low

pressure

pressure

string

Low

pressure

string

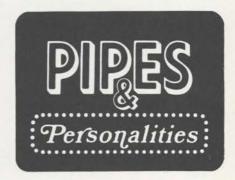
The correct placement and relative sizes of ears required to maintain a given tonality over a wide range of pressures and outputs.

work, while providing many times the acoustical output.

Erratum:

The diameter of the toe hole given on page 22 of the May/June '82 issue should be 1/4' minimum, not 1/2' minimum as given, as the toe hole diameter never need be as large as the diameter of the pipe itself. However, for those attempting to build this pipe, it will work without the added effort of tapering the foot.

Readers may send questions to Mr. Weisenberger in care of THEATRE ORGAN. Mail should be addressed to 3448 Cowper Court, Palo Alto, California 94306. Enclose a selfaddressed stamped envelope.



Landon Returns to Kentucky

Dr. John W. Landon reports that he has moved back to his former address, 809 Celia Lane, Lexington, Kentucky 40504. Fortunately, the property was not sold during his short stay in Cincinnati, so when a fund reduction forced the University of Kentucky to curtail the program in Cincinnati, John was able to return and reinstall his 3/10 hybrid theatre organ and 2/13 Pilcher church organ in his house. He says, "I am anxious to keep in touch with all my friends in the theatre organ world."

Mighty Wurlitzer Given To Colorado State University

A Mighty Wurlitzer will be installed in the Lory Student Center Theatre at Colorado State University this fall. The organ is a gift from Marian Miner Cook of Beverly Hills, California, in memory of her husband, John Brown Cook.

Valued at an estimated \$185,000, the organ was built in 1928 for the Piccadilly Theatre, Rochester, New



CONVENTIONS SURE ARE HARD WORK! These three young fellows, plus Diane Bellamy, were dedicated "go-fers" for official photographers Claude Neuffer and Rudy Frey, and their help was invaluable. They certainly were entitled to a nap! L to r: David Palevich, David Martin, Eddie Garcia. Last row in the balcony, Michigan Theatre, Ann Arbor, July 9, 1982.

(Bo Hanley photo)

York. Originally designed as a 3/13 with twin consoles, it later was installed in the Three Coins Restaurant in Louisville, Colorado.

The next stop for the organ was a pizza house in Provo, Utah, where it was expanded to 16 ranks. When that enterprise failed, Mrs. Cook purchased the organ. The organ now is being rebuilt, restored and expanded to 22 ranks.

In accepting the gift from Mrs. Cook, CSU President Ralph E. Christoffersen said: "We are delighted to receive this historic instrument for use in our music education

programs as well as for entertainment of students, staff and residents of the Fort Collins community."

The organ will be used for concerts and classes at CSU as well as to provide music for conferences and other activities in the student center, Christoffersen said.

"CSU will be the only major university to have such an instrument to use for teaching," said Robert N. Cavarra, CSU music professor. He added that CSU music students also study on the North German organ in the CSU music building and the classical French organ in Fort Collins'

Taping before a live audience, Mildred Alexander demonstrates her technique for her new video home-study course. (Laurie Garner photo)



Saint Luke's Episcopal Church.

Loveland resident Don Wick, a member of the American Theatre Organ Society, helped the university locate the Wurlitzer.

Mildred Alexander Offers Video Home Study Course

Mildred Alexander, known and respected throughout the United States as "the teacher's teacher," has just completed a video-taped course of organ instruction for use on home video recorder/players. The series of video tapes is a companion to the Mildred Alexander Methods, Inc. book series available through Richard Bradley Publications, Inc.

Video taping under the auspices of United States International University before a live audience at the Reuben H. Fleet Space Theatre in San Diego, California, producer Preston M. Fleet, in conjunction with Western Video, Inc. of San Diego, used the innovative overhead keyboard camera to present the complete audiovisual teaching course from the beginning through advanced levels in Mildred Alexander's own inimitable style.

Of particular interest to theatre organists are the study of open harmony and the Chicago, question-and-answer, and running-left-hand styles, as well as the techniques featured by such theatre organ greats as Eddie Dunstedter and Jesse Crawford.

The video tape series will be available soon on both Beta II and VHS at a special advanced sale price. For further information, contact Mildred Alexander Methods, Inc., 575-C Village Drive, M-APP, Carlsbad, California 92008.

Triumphant Tenth Packs the House

A remarkable event occured in Wichita, Kansas, on the evening of May 22. Ninety-nine performers appeared in the Century II Exhibition Hall to re-create the musical variety show made famous at the New York Paramount Theatre, the original home of the Wichita Mighty Wurlitzer. The occasion was the "Triumphant Tenth" anniversary of the Wichita Wurlitzer Pops Series. Slightly over 2000 persons from Wichita and miles around, including

visitors from six other states, were present.

The evening's program was billed as "The Musical Menu," with J. C. Combs formally dressed as a waiter with towel as Master of Ceremonies. Dr. Combs also conducted the W.S.U. Faculty Big Band, composed entirely of faculty members from the College of Fine Arts of Wichita State University. Two other W.S.U. musical groups, the Steel Band and the Marimba Band, were featured on the program. Billy Nalle blended the "Dowager Empress" perfectly with the other performers.

Quoting Homer and Jane McKee Johnson: "Starting out was the 'Appetizer' and the 'Big Combination' featuring the WSU Faculty Big Band and Billy Nalle.

"To us, a real highlight was the next item on the menu — 'The Chef's Choice,' featuring Billy Nalle in solo. Never have we heard 'Satin Doll' played as we heard it this night. People in the audience started swaying their shoulders and bodies in rhythm to his driving beat. What a thrill, and



Wichita Wurlitzer Pop Series Tenth Anniversary: Nalle at the organ, with WSU Big Band, Steel Band, Marimba Band and the Isely Singers in "Center City Rag."

what an ovation he received!

"Other items on the 'Menu' were the WSU Steel Band, the WSU Marimba Band and the 'Small Fries' of 72 students from the fourth, fifth and sixth grades of the Isely School doing precision dance and song numbers — an entertaining and charming revue of 'Moppet Rockettes.'

"The 'Entree,' of course, was Billy

Back Issues, Anyone?

Aisle 1 of the ATOS Back Issues storeroom.

Aisle 2 of the ATOS Back Issues storeroom.



Nalle soloing again on the Wichita Wurlitzer, a superlative rendition of 'I Got Rhythm,' a breathtaking build-up of tension to the climax and a rewarding finish!

"The 'Dessert' was the entire company plus the truly mighty organ playing Billy Nalle's own composition, 'Center City Rag,' which brought a rousing ovation!

"The true Paramount sound of this remarkable organ came through unmistakably and did great credit to its installers who faithfully tried to preserve the original voicing and regulation. This brings to mind a statement made to us in 1976 by the late Fred Feibel in discussing this organ, 'The beauty of this organ was almost overwhelming, especially when I was coming up on the lift — am I really playing this?' "

Just before the finale, the "grande dame" box office from the Miller Theatre in Wichita, now completely repainted and regilded and mounted on wheels, made a grand entrance onto the hall floor from a special door opening, with two box office attendants riding in it. During its entrance Billy Nalle played "Paramount On Parade," the music for the old Paramount Newsreel. The box office will be used at future concerts so that audience members can purchase recordings and tickets for coming concerts right in the hall.

For 1983, the three major concerts planned by WTO will be in the spring: Lee Erwin will appear March 26, Lyn Larsen on April 30, and Billy Nalle will headline on May 21 and present a guest artist.

Rossiter Points Out Errors

Allen W. Rossiter, Secretary of the New York Chapter of ATOS, has called our attention to a couple of errors in THEATRE ORGAN.

The most recent, in the May/June 1982 issues, page 26, stated that Bill Gage "... was elected chairman of the chapter in 1966, ..." According to Rossiter, Bill Gage never was elected chairman of NYTOS, and for the past twenty years officers have been *appointed* by the Board of Directors, not elected.

Going back further, Rossiter points out an error in a photo caption on page 16 of THEATRE ORGAN/ BOMBARDE, Summer 1966. "Dr. Parmentier plays the Radio City Music Hall organ in 1924" should probably read ". . . in 1934," as the RCMH opened in December 1932.

Doc Bebko Enjoys Show at RCMH

When organist Doc Bebko visits the New York City area, he invariably checks in at his old haunts such as Radio City Music Hall where he served in the 1939-41 era. On Memorial Day weekend, he and wife Stella attended the MH show. "I had a four-pound lobster in Freeport, New York, and that next to 'Encore' at the Music Hall, made this trip a winner. Rob Calcaterra and friend got a big hand from the full house who paid \$14.75 a seat. The organs are maintained by Shantz Organ Co. and appear to be in great shape.

"We also attended the Ringling Circus at Madison Square Garden. It featured a 15-piece band. Matt Cross was the organist. The great show was simply beautiful."

Ledwon's Wurlitzer To Be Dedicated

The reinstallation of John Ledwon's fire-damaged Wurlitzer is nearing completion. The organ has been enlarged by three ranks to now total 29. The original console has been totally rebuilt using Bob Truesdale's multiplexing and digital recording systems. The console sports all its original ornamentation and is now refinished in ebony and gold leaf.

John is planning an open house on October 24, 1982, and invites all ATOS members. The date is four years and one day after the brush fire which severely damaged the house and organ.

London and South of England "Mini-Safari" A Success

The "Mini-Safari" scheduled by London and South of England Chapter to celebrate its fifth birthday attracted 14 visitors from overseas (two from Los Angeles, two from New York, six from Holland and four from Ireland) for a weekend of organ music, dining and sightseeing.

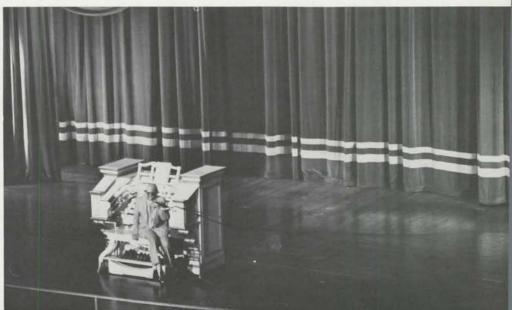
Harrow was used as headquarters for the event, which began Friday, April 23, with a trip to Edmonton for dinner and a concert by William Davies at the "Torch" Christie, Regal Edmonton. This was followed on Saturday morning by Walt Strony at the Granada Harrow, then a trip to Brighton for sightseeing, High Tea, and a concert by Douglas Reeve at the Dome Christie.

On Sunday the tour coaches headed for the south coast again, pausing at the Granada Kingston for music by Len Rawle at the Wurlitzer. Then on to Gosport for sightseeing and an afternoon concert at Thorngate Hall featuring Carolyn Ruddick and Joyce Aldred on the Compton, followed by the final dinner at Thorngate Ballroom.

Earlier in April members of the chapter occupied ten loggia boxes at London's Royal Albert Hall to hear Pierre Cochereau, Carlo Curley, Sheila Lawrence, Lyn Larsen and Robin Richmond in a program titled "The Organists Entertain."

William Davies at the "Torch" Christie, Regal Edmonton.

(John Sharp photo)





Carolyn Ruddick at the Compton, Gosport.

(John Sharp photo)



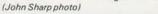
Walt Strony at the Granada Harrow Wurlitzer.

(John Sharp photo)

Joyce Aldred at the Gosport Compton.

(John Sharp photo)

Chapter members at the final banquet, Thorngate Ballroom, Gosport.









Douglas Reeve at the Dome Christie, Brighton. (John Sharp photo)

Organ Factory Doing Very Well





No, this is not the Wurlitzer factory. Model builder S. M. Sammarcelli, of 600 Callet Street, Palmdale, California 93550, tried an ad in THEATRE ORGAN and has received orders from all over the world. He has set up a small-scale production line to manufacture his miniature consoles.

Rosa Rio Students Progress In Careers

Two students of the Rosa Rio Studio in Huntington, Connecticut, who won awards in the Connecticut Valley Theatre Organ Society Scholarship Competition, have continued with their studies and careers in music.

David Scrimenti, 18, of Ansonia, captured third place in the 1982 Renee B. Fisher Awards for Outstanding Achievements in Music, at a recent competition in Westport. David, who is blind, has appeared in concert with Rosa at Thomaston.

Ronald Fabry, 22, of Huntington, was graduated with a bachelor of

music degree on May 10 from the Westminster Choir College in Princeton, New Jersey. Fabry serves as minister of music at the Cathedral of St. Francis of Assisi, Metuchen, New Jersey.

Rosa made a special guest appearance at St. Paul's Episcopal Church in Huntington, Connecticut, May 27 in "An Evening of Music." The occasion marked the official dedication of a pipe organ newly rebuilt by Dr. Garo Ray and his team. Rosa will give two concerts on this organ, September 25 and 26. She is also scheduled to play nostalgic Christmas shows with Ted Malone of "Between the Bookends" fame, December 4 and 5 for the Connecticut Valley Theatre Organ Society at Thomaston.

Chicago's Orchestra Hall Gets Pipe Organ

Orchestra Hall, home of Chicago's Symphony Orchestra, was recently renovated, the second in its 77-year history. The place had a pipe organ, but in 1966 during the first rehabilitation, it was removed, an electronic replacing it. Now, the swing is complete: a new Moller has been installed, replacing the electronic. The new pipe organ was a gift from the family of the late Mrs. Harold C. Smith, a governing member of the Orchestral Association. For the first time, all organ chambers are being utilized, whereas some had been merely empty facades. The new instrument was dedicated last December 7 by the Chicago Symphony Orchestra under Erich Leinsdorf, and featured organist Frederick Swann.

Betty Gould Still Playing in Phoenix

Betty Gould, veteran theatre organist (New York's Radio City Music Hall and Center Theatre among others), is still flicking the stop tabs and massaging the manuals. "I've done lunches for seven years at Organ Stop Pizza #1 here in Phoenix," she says. "Our original four-manual Wurlitzer console, after a year of complete overhaul, came back in mid-May with what seems like a million extra buttons, toggle switches, etc. It scares me into nightmares, but I expect to conquer it all eventually. Incidentally, the organ I played at the Center Theatre in New York, reposes in my boss' (Bill Brown) huge warehouse. He'll probably refurbish and install it in his next Organ Stop Pizza."

Don Thompson — A Busy Man

Don Thompson, who has played five hours a night, Tuesday through Saturday, for seven years at the Organ Grinder in Toronto, is embarking on an international tour in September. He will play at Thursford, Norfolk, England, on September 7 (ex-Odeon, Leeds, 3/19 Wurlitzer, where his career began), on September 10 at the Playhouse, Manchester, for the Manchester Organ Festival and the BBC, and at the Regal, Henley on Thames, on September 12.

Returning to the United States, Don will open the concert season for the Rochester Theatre Organ Society at the Auditorium Theatre on September 17. Then he goes on tour with "The Phantom of the Opera," playing at the Embassy Theatre in Fort Wayne on October 29 and 30, and at the Michigan Theatre in Ann Arbor on October 31. On November 20 Don plays at the Senate Theater in Detroit for the DTOC. Back again in Toronto, he will play at the Church of the Master on December 5.

As if all this were not enough, Don is heard weekly on CHRE radio and frequently on CJRT, CKQT, and the CBC network, and has recorded the sound track for a two-hour TV drama. In his "spare" time he operates a Conn dealership. 1982 is his 25th year as a full-time professional organist.

Ashley Miller Tours Australia

ATOS Director Ashley Miller left on July 26 for a two-month concert/workshop tour of Australia. His schedule includes concerts on a Christie in Brisbane, on a Wurlitzer in Sydney, a Christie and a Wurlitzer in Melbourne, a Compton at Ballarat, an electronic at Horsham, a Wurlitzer in Adelaide, then back to the Christie and another Wurlitzer in Melbourne, winding up on September 11 with a concert at Gold Coast.

With his regular musical duties at the First Church of Religious Science and Madison Square Garden in New York City, and touring in the United States and Canada, Ashley's 1981/82 season has been his busiest ever.