

the GRAND OPHICLEIDE

Journal of the Atlantic City Convention Hall Organ Society, Inc.

Volume 1, No. 4

Summer, 1999

AMERICAN INSTITUTE OF ORGAN BUILDERS

August 27, 1999

Mr. Stephen D. Smith, President
Atlantic City Convention Hall Organ Society, Inc.
1009 Bay Ridge Avenue, Suite 108
Annapolis, MD 21403

Dear Mr. Smith:

As an organization of professional organ builders and technicians, the American Institute of Organ Builders wishes to commend the Atlantic City Convention Hall Organ Society in its efforts to generate awareness, usage and the ultimate restoration of both the Midmer-Losh and Kimball Pipe Organs located in this great facility.

To that end, a Declaration of Support in Principle was unanimously passed by the Board of Directors of the Institute in its meeting on April 17, 1999.

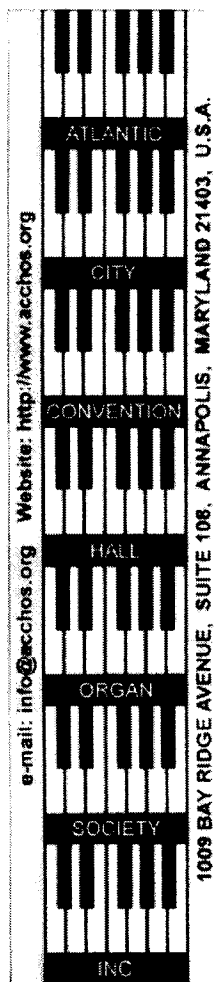
We applaud your efforts in securing the futures of these two famous instruments as important cultural and musical icons. Please be assured of our continuing interest.

Sincerely yours,

René A. Marceau

René A. Marceau
President
American Institute of Organ Builders

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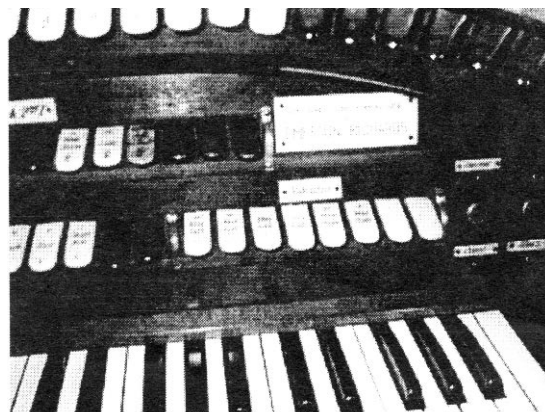
The Atlantic City Convention Hall Organ Society, Inc. is a 501(c)(3) corporation founded in 1997 and dedicated to the use, preservation and restoration of the organs in the Atlantic City Boardwalk Convention Hall.

the GRAND OPHICLEIDE is published quarterly for its members by The Atlantic City Convention Hall Organ Society, Inc.

Opinions expressed are those of individual contributors and do not necessarily reflect the official policies of the Society.



The Name Plates on the Kimball Organ in the Ballroom of the Atlantic City Convention Hall

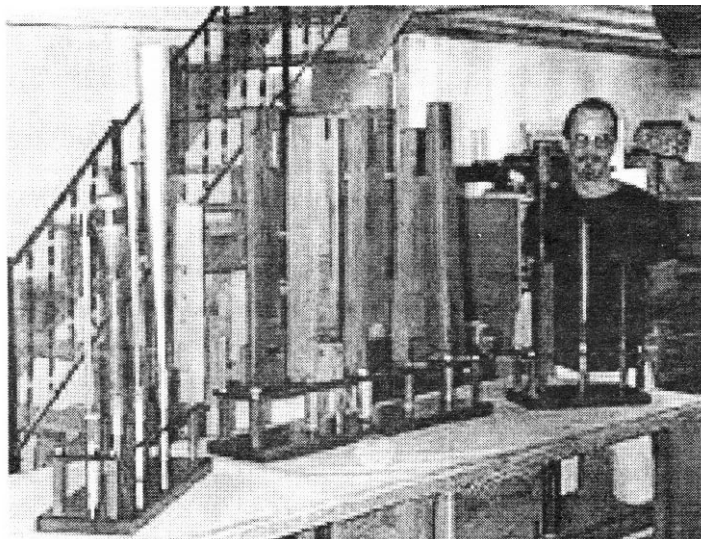


the GRAND OPHICLEIDE

Thank You

The ACCHOS wants to extend a sincere "Thank You" to **Nichols & Simpson, Inc. Organbuilders** of Little Rock, Arkansas and ACCHOS member **Timothy M. Bovard** of that firm, for the donation of time and materials to clean, prepare, and fabricate a display rack for a set of 12 sample pipes originally commissioned by Emerson Richards for the construction of the Midmer-Losh organ. These pipes came from a set of 19 exotic pipes that have been donated to the ACCHOS by former ATOS President, **Stephen Adams**, who also is graciously thanked for his kindness. The sample pipes will go on permanent display in the new ACCHOS exhibit being set up at Ocean One Mall adjacent to the Convention Hall.

Other heartfelt "Thanks" go to our special ACCHOS Benefactor who commissioned the printing and mailing of the second issue of **the Grand Ophicleide** to some 9,000 organ enthusiasts around the world. As a result of his effort, ACCHOS memberships have swelled along with sales of the new compact disc recording.



*Tim Bovard with the Display of Sample Pipes set up in the shop of Nichols and Simpson, Inc., prior to shipment to Atlantic City.
(Photo compliments of C. Joseph Nichols)*

Town Hall Meeting in Atlantic City

On the evening of October 13, 1999, a town hall meeting is scheduled at the Historic Church of the Ascension, Kentucky & Pacific Avenues, (30 South Kentucky Avenue), Atlantic City, NJ. This is the church that Senator Emerson Richards attended.

The meeting will start at 7 PM. This will be an effort to introduce the work of the ACCHOS to local townspeople. Portions of the new CD recording will be played and the past, present, and future of the ACCH organs will be discussed. ACCHOS members are cordially invited to attend; however, due to the ongoing construction work it will not be possible to access the auditorium to hear the Midmer-Losh organ at this time.

We apologize for the short notice of this event but, for reasons largely outside of our control, it has been convened rather hastily.

ACCHOS Exhibit at Ocean One

A new permanent exhibit celebrating the Midmer-Losh and Kimball organs of the Atlantic City Convention Hall is being prepared for installation at the Ocean One Mall near the hall. The exhibit will include a set of 12 exotic sample pipes commissioned by Emerson Richards during the design period for the Midmer-Losh organ.

Enlargements of some of the historic black and white photographs by Fred Hess & Son will be mounted in the exhibit area, along with newspaper articles, descriptions of the organs, and other details about the instruments. Plans call for a music system to provide the sound of the organ in the background during exhibit hours.

The exhibit is scheduled to open on Wednesday, October 13, 1999.

the GRAND OPHICLEIDE

More Thanks

A very special "Thank You" to our Patron, **Jeffery L. Weiler, Secretary of the American Institute of Organbuilders**, for making the motion at that organization's spring board meeting which resulted in the Letter of Support printed on the front page of this issue.

We also thank the **Board of Directors of the AIO** for the Declaration of Support in Principle. We appreciate the support of this professional organization for the efforts and goals of the ACCHOS.

Also, we wish to express our gratitude to **Clark Wilson** for making available to the ACCHOS a copy of the original Kimball Factory File for the Ballroom Organ. Having a copy of this file is helping to answer questions relating to the Kimball Organ.

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New Gift Items From Cre8iviTee

Several new gift items are now available from the Cre8iviTee on-line store. You may inspect and order them on the web at:
<http://www.cre8ivitee.com/worldslargestpipeorgan.htm>

A new T-shirt with the words "I SUPPORT THE WORLD'S LARGEST ORGAN" on the back and a large photo of the 7-manual console on the front is now available.

The first in a series of "Quarterly" coffee mugs intended to be co-incident with quarterly issues of THE GRAND OPHICLEIDE is available. The first mug, designed by ACCHOS President Stephen Smith, features the FANFARE ORGAN with a photo and descriptive text wrapping around the mug.

A new T-shirt with color photos of the 7-manual console, 5-manual portable console, and the left and right stop jambs is now available.

Cre8iviTee donates a portion of every sale directly to the ACCHOS.

New Booklet Available

A new 60-page booklet is available entitled: **THE ATLANTIC CITY CONVENTION HALL ORGAN**. It contains four essays by Stephen D. Smith as follows:

- An introduction to THE WORLD'S LARGEST PIPE ORGAN
- THE WORLD'S LARGEST PIPE ORGAN
- INDEX OF STOPS ON THE MAIN AUDITORIUM ORGAN IN THE CONVENTION HALL, ATLANTIC CITY, NEW JERSEY, U.S.A.
- THE FIVE MANUAL CONSOLE OF THE MAIN AUDITORIUM IN THE CONVENTION HALL, ATLANTIC CITY, NEW JERSEY, U.S.A.

This booklet replaces all the previously issued separate pamphlets which are no longer available. It provides a comprehensive overview of the Midmer-Losh organ with complete stop lists, illustrations, and photographs. The booklet sells for \$15 postpaid in the U.S. or \$17 overseas.

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CD Recording Gift Packs for the Holidays

A set of 5 copies of the Compact Disc recording "**The Auditorium Organ**" is available for gift-giving purposes. They may be ordered directly from the ACCHOS for \$72 postpaid in the United States only. They will be shipped in a sturdy Priority Mail cardboard box.

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ATLANTIC CITY RENAISSANCE LP Recording

We are completely sold out of this recording and no more orders can be accepted for it.

the GRAND OPHICLEIDE

Two Jewels In The Crown

As if having a seven-manual, 449-rank pipe organ in its main auditorium wasn't enough, the Atlantic City Convention Hall also boasts a second jewel in its pipe organ crown; the splendid 55-rank instrument in the Ballroom by W.W. Kimball of Chicago, Illinois.

Atlantic City is famous for its beaches, salt water taffy, fine restaurants, and spacious boardwalk. Its convention hall is the world's largest - occupying four city blocks - and houses the largest pipe organ in the world. This gigantic instrument, built by Midmer-Losh of Long Island, N.Y., is located in the 41,000-seat Main Auditorium and was designed to fill the room's nine-and-a-half million cubic feet of space with sound.

In another part of this monumental building is a 5,000-seat ballroom, measuring 181 feet long, 128 feet wide, and 75 feet high. The Kimball organ, like its big brother in the main auditorium, was designed by Senator Emerson Richards who also supervised the installation and tonal finishing of both instruments. The shape and dimensions of the ballroom, together with its hard maple dance floor afford an elegant and rich acoustical setting for the organ, which speaks from two separate chambers, via decorative grills, flanking a large stage at one end of the room. The console is located on a balcony to the right of the right chamber.

The Kimball is extraordinarily versatile and is intended to serve as a classical and theatre organ. It has 19 straight voices and 23 units, totaling 55 ranks and 4,155 pipes. In designing the instrument, Senator Richards first specified a "major" Diapason chorus for the fourth manual and a "minor" Diapason chorus for the first. To these he added chorus reeds, including the only known Brass Trumpet stop made by Kimball. He then provided 23 unit voices, comprising flutes, strings, and reeds of orchestral character. This 'hybrid' organ proved to be an outstanding success, being of solid but brilliant character. It is said to be both larger and louder than any theater organ.

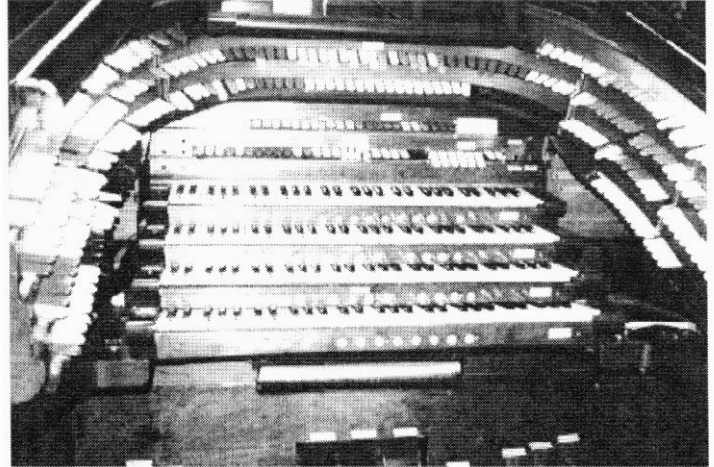


Photo of the Kimball Console taken by Charles Swisher during the Board of Directors visit to the Convention Hall in November of 1998.

There are a full complement of percussions, including a grand piano. (See footnote on Page 6) The four-manual console has 357 stop keys and was the largest horseshoe console ever built by the firm. A Kimball "Soloist" roll-player is located near the console.

The instrument was designed in 1929 and the installation was completed in April, 1931.

A 30 horse-power "Orgoblo" blower (#23635) provides wind pressures at 10 and 15 inches. It is located in the building's parking garage and has a large oil bath filter on its intake. Also, at one time, a water spray was in use. While the spray head and the pneumatic to control it are still in place, it is not currently used. A booster blower for 25-inch wind is situated in the dressing room area near the Ballroom.

The first and only recording of the Kimball was made in 1956 by Mercury Records and is entitled "Boardwalk Pipes". It features Robert Elmore performing works by Sousa, Kreisler, Elmore, Kramer, Weaver, Boex, and Clarke. Although long out of print, secondhand copies of this album can sell for up to \$100. Thanks to the kindness of the Convention Hall's managers, this venerable instrument is to be recorded on compact disc by the ACCHOS later this year. Release is scheduled for early in 2000.

The "Voice List" for the Kimball Organ is on the next page - More photos later in this issue.

the GRAND OPHICLEIDE

W. W. KIMBALL CO. - BALLROOM - ATLANTIC CITY CONVENTION HALL

Voice No.	Pitch	Voice Name	Chamber	# of Pipes	Wind
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UNIT RANKS

1	32"	Bombarde	R	97	25"
2	16'	Tuba	R	97	25"
3	16'	Diaphone/Diapason Phonon	L	85	15"
4	16'	Trumpet	L	85	15"
5	16'	Post Horn	R	85	15"
6	16'	Contra Faggoto	L	85	10"
7	16'	Tibia Clausa	L	97	10"
8	16'	Bourdon/Stopped Flute	L	101	10"
9	16'	Violin Diapason	R	85	10"
10	16'	Violin I	L	97	10"
11	8'	Open Diapason	R	85	15"
12	8'	Clarabella	L	85	10"
13	8'	Flauto Dolce	R	85	10"
14	8'	Gemshorn	L	85	10"
15	8'	Clarinet	R	73	10"
16	8'	English Horn	L	61	10"
17	8'	Kinura	L	61	10"
18	8'	Vox Humana	L	73	10"
19	8'	Cello	R	73	15"
20	8'	Cello Celeste	R	73	15"
21	8'	Violin Celeste	L	73	10"
22	8'	Viola	L	85	10"
23	8'	Viola Celeste	L	73	10"

STRAIGHT RANKS

24	8'	Diapason Major	R	73	10"
25	8'	English Diapason	L	73	10"
26	8'	Muted Diapason	L	73	10"
27	8'	Melophone	L	73	10"
28	8'	Flute Overte	R	73	10"
29	8'	Flute Celeste	R	73	10"
30	8'	Gemshorn Celeste	L	73	10"
31	8'	Brass Trumpet	R	73	15"
32	8'	Saxophone	R	73	15"
33	8'	French Horn	R	73	15"
34	8'	Orchestral Oboe	R	73	15"
35	8'	Orchestral Strings	L	134	10"
36	8'	Orchestral Strings II	L	134	10"
37	8'	Muted Strings	L	134	10"
38	4'	Major Octave	R	73	10"
39	4'	Octave Diapason	L	73	10"
40	2'	Major Fifteenth	R	73	10"
41		Grand Mixture VII	R	511	10"
		12-15-17-19-22-26-29			
42		Mixture V	L	305	10"
		15-19-22-26-29			

PERCUSSIONS

A	Piano - See Note Below	J	Castinets	L
B	Harp/Celeste R	K	Tambourine	L
C	Xylophone L	L	Wood Block	L
D	Glockenspiel L	M	Tom Tom	L
E	Chimes R	N	Triangle	L
F	Bass Drum L	O	Birds	L
G	Cymbal L	P	Sleigh Bells	L
H	Snare Drum L	Q	Vibraharp	L
I	Chinese Gong L			

NOTE: The Grand Piano was originally on the Stage of the Ballroom. It was disconnected and removed circa 1968.

the GRAND OPHICLEIDE

Special Report

FIVE DAYS IN SIX CHAMBERS

by Stephen D. Smith

Seibert Losh, in his unpublished book *The Physics of Music*, wrote "The temerity of an organ man who is writing down and publishing...is matched in idiocy only by the presumption of a layman who ventures to instruct the professors." I know exactly what Seibert means, for despite more than two decades of researching the Midmer-Losh organ in the Atlantic City Convention Hall, some of the information I had accepted as fact was wrong and, in the past, I have been "writing down and publishing" it!

Fortunately, however, I am now able to correct that information thanks to the kindness of Dennis McGurk (Curator of Organs) and Robert McClintock (General Manager) who allowed me to spend five days in and around six of the Auditorium instrument's eight pipe chambers (the two Upper chambers are out of bounds due to an asbestos hazard). Although this was not my first visit to the Convention Hall, it was my longest and undoubtedly the most profitable from a research point of view.

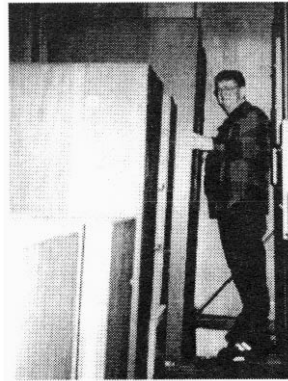
I should mention that, in the following pages, I sometimes make mention of changes to the specifications or additions to the instrument. These were made as construction progressed and, to the best of my knowledge, the only alterations made since completion are to be found on the Great organ – where the 32' Sub Principal stop-key has been re-wired as a 16' register and the sub-quint rank in the *Grand Cornet* has been disconnected (in fact, this stop is not working at all, at present.). These changes were made by Roscoe Evans, the instrument's first curator, at some time during the 1940s.

Anyway, here is the report of my findings:

Pedal Right Diaphone-Dulzian (stop 17)

The scale of this stop's 64' pipe has variously been reported as measuring 36"x36" and 27"x27". In fact, it is the latter, meaning that the 32' pipe of the Pedal Left's *Diaphone* (stop 11) is the instrument's largest in terms of scale, as it measures 30"x30" [see picture 1]. I also discovered that stop 17 has diaphone pipes for its lowest 22 notes (from CCCCC up to AAAA), not the lowest 12, as I had previously been given to believe.

This stop has had a checkered history. Emerson Richards originally specified two 64' stops for the instrument; a *Diaphone* in the Pedal Right and a *Dulzian* in the Pedal Left. The *Diaphone* was deleted when the scheme was revised and the *Dulzian* was moved from Left to Right. However, its original stop number, 17, was retained, thus placing it out



Picture 1: Dennis McGurk among the Pedal Left's massively-scaled *Diaphone* pipes

of sequence with the other Pedal Right stops (numbered 1-10). Experiments revealed that the reed's tone at this pitch was not desirable, as its harmonics were louder than the fundamental. Although leathering the shallot (as in the 64' Contra Trombone at Sydney Town Hall, Australia) would have absorbed many of the overtones so that the fundamental could be better heard, the contract stated that this could only be done in "exceptional circumstances". It seems that this criteria was not met so, to cut a long story short, it was decided to provide diaphone pipes for the rank's lowest notes.

Although, I generally refer to the stop as "Diaphone-Dulzian", in my opinion it should be thought of as a 64' reed which, coincidentally, happens to have diaphone pipes in its lowest notes. Indeed, the stop probably would be thought of in this way if the *Diaphone Profunda* stop-key had never been installed on the console (it was provided because, at one time, it was hoped that each pipe could produce both *Diaphone* and *Dulzian* tone with the aid of a special dual-tone shallot). In organs of more moderate size, diaphone pipes in the bass of a 32' or 16' stop would be of little interest to the organ fraternity and would go unnoticed by people who were not familiar with the instrument. It is only the fame of the Auditorium organ and the profound pitch of this stop that has drawn attention to its diaphone pipes.

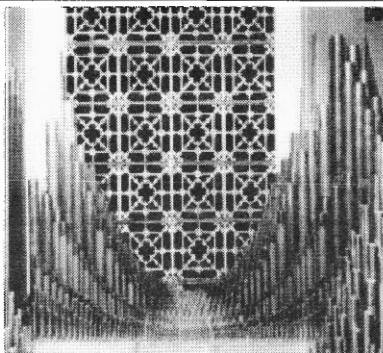
Unenclosed Choir Rausch Quint (stop 171)

This stop provides two registers, 12-15 and 19-22, and the fact that they both have the same stop number lead myself and David Junchen, among others, to believe that the stop consisted of two extended ranks. In fact, it has four straight ranks of 73-pipes each and, strictly speaking, it is *two* stops – because its ranks are operated as two pairs (rather than as one group of four). In this respect, the *Rausch Quint* is unique among the instrument's mixtures, because although certain ranks of other mixture stops *are* independently playable, it is always just one stop key that controls the whole [see picture 2].

the GRAND OPHICLEIDE

Special Report

Picture 2: The Unenclosed Choir organ. Nearest the camera is the *Rausch Quint*, with only two ranks *in situ*. However, closer inspection of the photograph reveals holes in the soundboard for the stop's other two ranks



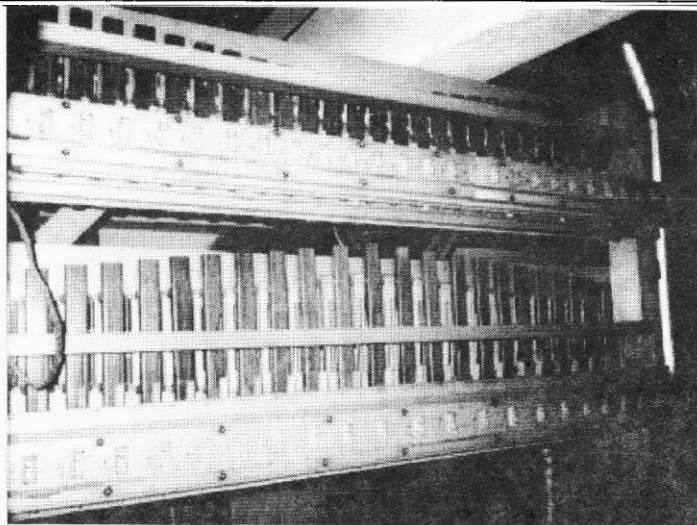
Percussion Department (stops A-P)

As originally conceived, this department was to consist of 15 non-melodic percussions (drums, cymbals, etc) and a *Grand Piano*. It was to be enclosed in its own swell box in the Left Forward Chamber, alongside the enclosed Choir organ. However, because the stops were very quiet in comparison with the speaking stops, it was decided to move the department to a sound-proof room on the right side of the auditorium below the gallery's seats (the Great-Solo's melodic percussions were also installed here). Sound from this room was picked up by a microphone and amplified by the hall's public address system. The *Grand Piano*, however, was installed adjacent to the Gallery III organ in the Left Center chamber, where it still resides (it's a Chickering Concert Grand and cost \$900, according to the invoices for the instrument).

At some stage, *all* of the stops were moved out of the sound-proof room and installed, unenclosed, in the Right Stage chamber [see picture 3] and a cylindrical brass *Gong* was added. On the five-manual console, this *Gong* is operated by a piston and on the main console it is operated by the Great-Solo's Gemshorn 36th stop-key. The *Gong* piston is marked "A", which was formerly the Grand Piano's identifying letter.

In my opinion, it is quite right to think of the Percussion department as it now stands (as opposed to how it was originally conceived) as containing 16 stops, all non-melodic. The *Grand Piano*, being placed in a separate location, is not really part of the Percussion section and should be thought of simply as a stop in its own right without a 'home' department. Also, it could be legitimately considered as stop #321, thus giving it an identifying number (instead of a letter) like all of the instrument's other melodic percussions.

Because the Percussion department is now unenclosed, its swell box selectives – for switching its box onto the various swell shoes – are obsolete. Similarly, although the String III organ (located behind the Fanfare organ in the Left Upper chamber) was originally an enclosed department, its



Picture 3: The Great-Solo's 49-note *Xylophone*. Originally, this stop was to be enclosed with the department's "Organ" section and the *Chimes* and *Harp* were to be included in the "Orchestral" division. All three stops are now unenclosed.

shades were removed when the decision was taken to enclose the Fanfare. Consequently, the String III's swell pedal selectives are also obsolete and the department's volume is controlled by the Fanfare's shades.

In summary, the corrections are as follows: The instrument has 449 ranks, not 447 (the extra two ranks being found in the Unenclosed Choir's *Rausch Quint*); the *Dulcian* has 22 diaphone pipes, not 12; the Percussion department's stops are *unenclosed* in the Right Stage chamber (as are the Great-Solo's percussions), not enclosed in the Left Forward chamber, and there is an additional stop, the *Gong*. Finally, the *Grand Piano* is located in the Left Center chamber.

I should now like to move on to the subject of pipe numbers. This has been a hotly-debated issue over the decades, but I now feel able to speak on the subject from a position of some authority. I would say, however, that I doubt my figures are 100 percent correct, but at least I now have quite a volume of evidence in support of them. The official number of pipes, as stated in *The Guinness Book of World Records*, is 33,112 but I believed the figure was more likely to be in the region of 32,900-plus. In the event, my calculations resulted in a figure *very close* to the official one.

I should perhaps mention here that many of the currently accepted pipe numbers are based upon information contained in copies of the Auditorium organ's contracts. Approximately 100 of these were printed and given to people who visited the hall whilst the instrument was being built. However, a number of details were changed as construction progressed, so some of the information in those contracts was redundant but, nevertheless, it still found its way into general circula-

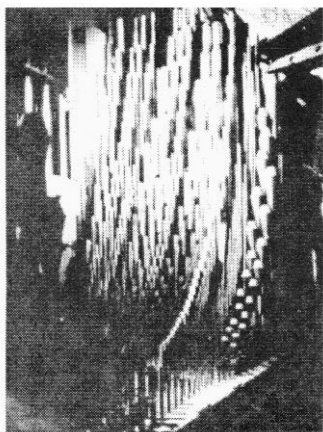
the GRAND OPHICLEIDE

Special Report

tion. For example, the Choir organ's big reeds, the Trombas and *Brass Cornet*, are voiced on 25 inches of wind not, as stated in the contract, 20 inches. Certainly, these contracts cannot be relied upon for accurate pipe figures; not only because the number of pipes in some ranks was increased or decreased, but also because some were incorrect from the outset!

In the past, much has been made by some people of a few letters which state that the Auditorium organ is incomplete. I agree, it *is* incomplete, but only because relays which would have allowed the two consoles to be played independently of each other were omitted (therefore, if a stop were to be drawn on the Great of the seven-manual console, it would also be playable on the Great of five-manual – if it were connected to the instrument which, at present, it isn't).

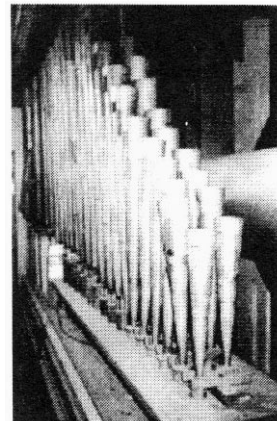
But what evidence is there to support the theory that all of the stops, ranks, and pipes are there? Well, firstly, there are photographs of at least one pipe from *every* rank in the instrument (suggesting that all stops *were* built). Secondly, I am pretty certain that Emerson Richards would have refused to sign the Certificate of Completion if stops were omitted, and thirdly, I saw no vacant chests in any of the six chambers I visited (except where pipes had been moved due to water damage and the like). In the case of the Fanfare and Echo chambers in the ceiling, which I wasn't able to access, photographs show almost all of the pipes in those departments *in situ*. Likewise, there is a photograph of the String III organ *as installed*, so we know the department is complete [see picture 4].



Picture 4: The String III organ is the most remote department from the main console, being approximately 325 feet from it.

Having said all of that, I am aware that the Pedal Left's *Major Posaune* has 44 pipes (16'-8") instead of the planned 85. The reason for this arrangement is not known, although it is likely that it was one of the last stops to be installed – at a time when money was in short supply [see picture 5].

Picture 5: The Pedal Left's *Major Posaune*. This stop now has only 43 pipes, as the smallest one, measuring about one-and-a-half feet in length, is missing — presumed taken by someone as a souvenir of their tour of the instrument!



I have approached the subject of pipe numbers from a number of angles, and included among the documentary evidence I have studied are: (1) The instrument's actual contract (complete with signatures and seals); (2) A "Working Contract" (which includes appended notes showing alterations to the printed content); and (3) all 29 of the instrument's invoices (which detail *hundreds* of items). In addition to this material, I have studied the contents of all Auditorium organ stop lists I have been able to acquire. Furthermore, during my five days in the chambers, I took a "sample count" of pipes from departments in order to establish the likely number of pipes in each rank. I reckon that I counted about 12,000 pipes in the six chambers I had access to. When a survey of one of the world's other greatest organs was conducted recently, it was discovered that a number of straight ranks which, reportedly, had 73 pipes had, in fact, only 61, and I wanted to know if numbers had been similarly *inflated* in the case of the Auditorium organ. The short answer is "No, they haven't".

Another consideration in my calculations was the stop-keys on the consoles, for surely they would help indicate the number of pipes in a stop? (bearing in mind that derivations are shown by the stop's number engraved on its stop-keys). Therefore, if a department has a compass of, say, 73 notes, it stands to reason that its straight stops will have 73 pipes-per-rank, whilst its extended stops will have 73 plus 12 for each additional octave.

I do not believe that anyone has previously considered the subject of pipe numbers in such detail, taking into account all of these various factors. I'm not even convinced that Emerson Richards knew exactly how many pipes there were in the instrument, as there are a number of instances in the contract where he specified too few or too many pipes for the available registers. In the case of the Swell-Choir, for example, he specified 97 pipes for each and every stop, despite the fact that less were required for some stops and more were necessary for others. For the Pedal organ, he

the GRAND OPHICLEIDE

Special Report

sometimes underestimated the number of pipes, but this was probably because he changed some of his ideas and neglected to include them in the contract.

Briefly, this is what happened: In the very first contract (specifying an organ of some 43,000 pipes) there was to be a "Grand Choeur" department, playable from the Choir manual and comprised of a selection of stops duplexed from the Pedal Right and Pedal Left. However, when the specifications were revised – supposedly in order to reduce the cost of the instrument – Richards came up with the idea of a "Grand Choir" (derived solely from Pedal Left voices) on the first manual and a "Grand Great" (derived solely from Pedal Right voices) on the second manual. When it came to printing the *revised* contract, Richards did not alter all of the details to take account of these changes (in fact, this scaled-down contract was largely a reprint of the original, but with 158 stops deleted). Therefore, not all of the Pedal stops which were now to be playable from the "Grand Choir" and "Grand Great" departments were indicated.

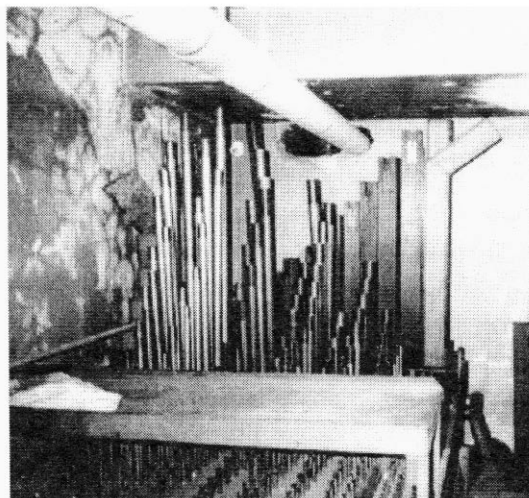
One error in the Pedal organ's pipe numbers concerns the Right side's *Tibia Clausa*, which is listed as having 85 pipes. This is enough to provide notes for its 8' register on the Grand Great (sounding the 8' pipe at the CC key and the 16' pipe at the CCC key), but as the stop includes a 32' octave, there must be 97 pipes. To check out this theory, I played though the entire rank, from bottom to top, and discovered that there are indeed 97 pipes, not 85. Richards made similar errors with a number of other Pedal stops, some of which I also played or visually inspected in order to establish the truth of the matter. Here are the **Pedal** organ's numbers: 109 pipes: *Principal* (Right), *Fagotto* (Left). 97 pipes: *Tibia Clausa* (Right), *Trumpet* (Right), *Diaphone* (Left), *Diapason* (Left), *Bombard* (Left). 85 pipes: *Tibia Major* (Right), *Viol* (Right), *Bombardon* (Right), *Grand Ophicleide* (Right), *Diaphone-Dulcian* (Right), *Diaphonic Diapason* (Left), *Bass Viol* (Left), *Tibia Clausa* (Left). 68 pipes: *Tierce* (Right), *Septieme* (Right). 44 pipes: *Major Posaune* (Left). 39 pipes: *Diaphone Phonon* (Right).

The only two straight stops on the 21-voice Pedal organ are the Pedal Left's 16' *Major Diapason* (32 pipes) and the seven-rank *Stentor Sesquialtera* (224 pipes). Eighty-eight registers are derived from the 19 extended stops and, in total, the seven-manual console possesses an amazing 182 Pedal organ stop-keys (including manual duplexes but excluding percussions, couplers, and second touch registers).

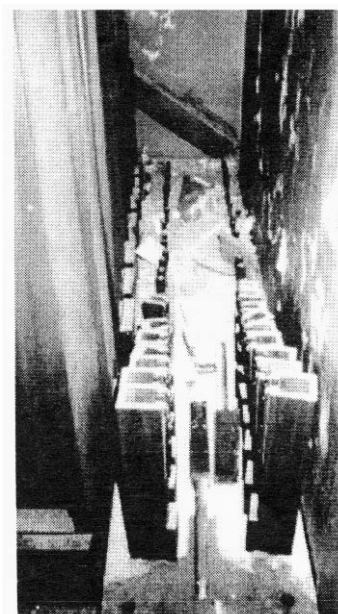
Stops on the **Unenclosed Choir** organ have 73 pipes-per-rank, and straight stops on the enclosed **Choir** also have this number. The highest octave of pipes (notes 62-73) in these ranks will sound when the 12 uppermost keys (c^{#4}-c⁵) of the

Choir manual are played. For convenience, I generally refer to this top octave of pipes as *extra pipes*. These *extra pipes* also ensure that the Octave coupler does not *run out* of notes to sound when playing in the c^{#3}-c⁴ octave of the keyboard.

It would seem that *extra pipes* are also provided for the enclosed Choir organ's four extended stops: *Dulciana* (16'-5¹/₃', 92 pipes); *Dolce* (4'-1') and *Contra Tromba* (16'-4'), 97 pipes; *Melodia* (16'-2'), 109 pipes. The flute celeste, *Unda Maris*, was originally to have 61 pipes (Tenor C-c⁵) but, according to the working contract, 12 stopped pipes were added for the notes CC-Tenor C. The two-rank *Voix Celeste* is reported as having 134 pipes (one rank from CC- c⁵ and the other from tenor C to c⁵) [see pictures 6 and 7].



Picture 6: A view of the enclosed Choir organ. Among the stops on this chest are the mixtures (right) and higher-pitched voices. The wooden pipes belong to the extended *Melodia* rank. Evidence of water damage can be seen on the walls.



Picture 7: Treble pipes of the *Melodia*. When workmen gouged a hole in the chamber's wall for a new service pipe (visible in the top left of picture 6), these pipes were covered with plaster and other debris. The same thing has happened in other chambers.

the GRAND OPHICLEIDE

Special Report

In the **Great** organ, there are 73 pipes-per-rank (CC-c⁵) in all stops except the extended *Principal* (32'-2', 121 pipes) and *Double Diapason I* (16'-4', 97 pipes). Also, the 17th rank in the *Furniture* has only 49 pipes (middle C-c⁵). This was an additional rank and although the stop-keys on the consoles indicate a composition of five ranks there are, actually, six.

Previous stop lists for the **Great-Solo** department's two divisions all agree on pipe numbers; the totals being 1,267 for the "Organ" (flue) division and 1,008 for the "Orchestral" (woodwind/reed) division. However, I counted *all* of the reed pipes in the Orchestral division am therefore able to disprove some of the numbers given in previous stop lists, e.g. the *French Horn* (stop 98) has 85 pipes, not 97. Some ranks in this division have *extra pipes* but others have not, e.g. the *Vox Baryton* has 85 pipes (73-notes for its 16' and 8' pitches), whereas the *Vox Humana* has 73 pipes (61 notes for its 8' and 4' pitches).

The division's four straight reed stops have 73 pipes each. The *Oboe Horn*, *Saxophone* (stop 96), and *English Horn* have 97 pipes and are all playable at 16'-8'-4' pitches. Also available at these pitches are the *French Horn* (stop 98), *Vox Baryton*, and *Krummhorn*. These three stops have 85 pipes each.

The division's only flue stop, the *Flute Twelfth* was originally on the Solo organ but, at a fairly early stage, it swapped places with the Orchestral division's straight *French Horn* (stop 104). Originally, the *French Horn* had 73 pipes, but the top 12 were omitted when it was moved to the 61-note Solo chest. Likewise, the *Flute Twelfth* originally had 61 pipes, and this is the number I have used in my calculations for the department, as I did not note whether or not 12 extra pipes have been added now that it resides on a 73-note chest.

At the back of the Orchestral division's box is one octave of flue pipes, ranging from 2'-1'. These do not appear to belong to a speaking stop, and were probably provided for tuning purposes in this all-reed division. Therefore, they have *not* been included in my pipe number calculations.

Previous stop lists seem to indicate that most of the stops in the Great-Solo's "Organ" division have *extra pipes* but, personally, think this is unlikely. However, when I reviewed my notes about the pipes in this division, they did not make sense, so it seems that my count somehow went awry. Therefore, until such time as I am able to confirm which stops, if any, in this division do indeed have *extra pipes*, I have allocated the minimum number necessary to provide each register with 61 notes, rather than 73.

Consequently, figures are as follows: *Gemshorn* (8'-1/4'), 121 pipes; *Wald Flute* (16'-2'), *Geigen Principal* (16'-2'),

Gemshorn Terz (6²/5'-4/5'), and *Gemshorn Quint* (5¹/3'-2/3'), 97 pipes. The *Tibia Clausa* (16'-2²/3') has 92 pipes; the *Gemshorn Celeste* (8'-1³/5') has 89; and the *Horn Diapason* (8'-2') and *Gemshorn Septieme* (4⁴/7'-1¹/7') both have 85. Finally, there are four 73-pipe stops; *Diapason Phonon*, *Doppel Gedeckt*, *Viola d'Gamba*, and *Vox Celeste*, all of which are available at 8' and 4' pitches.

This gives a total of 1,152 pipes – 115 short of the number given in previous stop lists for the division.

The **Swell** organ is something of a peculiarity. On the main console, it is played from a 73-note keyboard (GGG-g⁴), and most of its stops have an 80-note compass (CC-g⁵), providing an octave-and-a-half of notes above the c⁴ key – that's seven notes *higher* than the top C on a 73-note rank! These highest notes will only sound when the Swell's octave coupler is in use, as they have no manual keys of their own. Conversely, the lowest five keys of the Swell manual have no *pipes* of their own and exist largely for cosmetic reasons. However, they will sound notes from the Grand Choir if that department is coupled to the Swell manual.

Although most of the Swell organ's ranks have 80 pipes-per-rank, previous stop lists have indicated only 73 for some ranks. I was puzzled at the provision of 80 pipes for the *Traverse Flute* and *Orchestral Piccolo* but not for the *Octave* and *Fifteenth*, both of which reportedly had 73 pipes. My sample count of ranks in this department included two stops which, supposedly, had 73 pipes but, in fact, they too had 80. Therefore, it does not appear unreasonable, in my view, to assume that all the Swell's straight stops have 80 pipes, and I have revised the pipe numbers accordingly (incidentally, this is one of the few occasions where I have estimated *upwards*, and only four stops are involved – 28 pipes, in total).

Following the addition to the Swell organ of the *Cymbal*, with 80 pipes-per-rank, it was decided to provide the other mixtures' ranks with this number too. The *Octave* and the *Fifteenth* then seem to have followed suit – perhaps because their 73-pipe ranks seemed rather incongruous in a diapason chorus comprised of unisons, a double, and mixtures all with 80 pipes-per-rank. The only stops with more than 80 pipes-per-rank are the four 104-pipe units (*Double Diapason*, *Contra Gamba*, *Double Trumpet*, and *Double Horn*) which are all available at 16' and 4' pitches.

The first *Viol Celeste* was not included among my *sample count*, so I have listed 134 pipes; the commonly accepted number for this stop. I know that the second *Viol Celeste* has 146 pipes because I counted them. The reason for these compound celestes not having a compass of 80 notes, like every other stop on the department, is just another of the Swell organ's peculiarities.

the GRAND OPHICLEIDE

Special Report

My count of five stops in the **Swell-Choir** organ revealed no ranks with *extra pipes*, but I may have been unlucky and, by chance, counted only those which do not have them. However, because I have no evidence of their existence in this department, I have for the purpose of this exercise assumed that each register has a compass of 61 notes. The pipe numbers are, therefore, as follows: *Gemshorn* (8'-1/4'), 121 pipes; *Fifth* (5 1/3'-1 1/3'), 109 pipes; *Gemshorn Celeste II* (8'-1 3/5'), 89 pipes; *Clarabella* (8'-2 2/3'), 80 pipes. The *Doppel Gedeckt* (16'-2') and *Third* both have 97 pipes, and the *Gemshorn Celeste I* (8'-1 1/3') & *Stopped Diapason* (16'-2 2/3') both have 92. The remaining nine stops have 85 pipes each and are all available at three pitches.

In comparison with many of the other departments, the **Solo** organ is like a *breath of fresh air*. It is a straightforward 61 notes-per-rank department, but the *Major Flute*, *Tuba Magna*, and *Trumpet Profunda* units have 85 pipes each.

The **Fanfare** organ also has 61 notes-per-rank, so calculating the number of pipes here is a fairly easy affair too, although extension is comprehensively used among the reed stops. Therefore, all ranks have 61 pipes except the following: *Trombone* (32'-4') and *Bombardon* (16'-2'), 97 pipes; *Posaune* (16'-4') and *Tromba Quint* (10 2/3'-2 2/3'), 85 pipes; *Harmonic Tuba* (8' and 4') & *Tromba Tierce* (6 2/5' and 3 1/5'), 73 pipes (there is a slim possibility that the *Tromba Tierce* has 85 pipes, because it appears on the five-manual console at 1 3/5', but as it is not available at this pitch on the main console, I doubt that the extra 12 pipes exist). The department's only extended flue stop, the *Major Flute* (16'-4') also has 85 pipes.

The **Echo** organ is another department with 61 notes-per-rank. In theory, this means that calculating its pipe numbers should again be a simple task but, in this case, there are a few complicating factors.

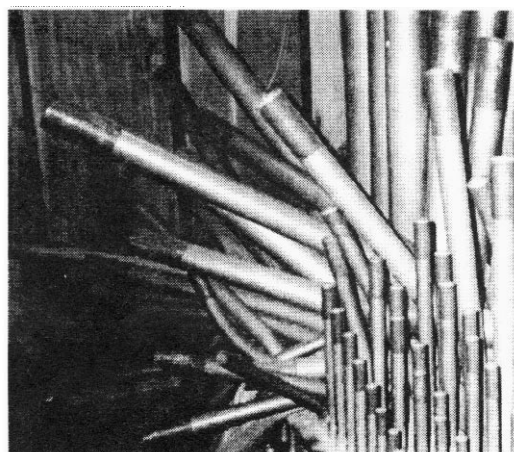
In the contract, the *Spitz Flute Celeste II* is shown as a straight 8' rank from Tenor C, but hand-written notes in the *working contract* mention its conversion to a unit stop – providing 8', 3 1/5', and 1 3/5' pitches – with 77 pipes (61 notes for each mutation register and 49 for the unison). Other hand-written notes indicate the addition of the *Violone Celeste*. One entry states that this stop was to have 54 pipes, whilst another says 61. To confuse matters further, most other stop lists indicate 56 pipes! I have opted for the lowest of these three numbers, i.e. 54, because on the whole I would prefer my estimates to be *under* rather than *over*. The *Spire Flute* is widely reported as having 97 pipes, but this is not enough for its registers, which range from 16' to 1'. It may be the case that the top octave of the 1' is sounded by *repeating* the highest octave in the 97-pipe rank, but nowhere in any of the contracts or other documents that I have seen is there any

mention of this mechanism, and it is debatable as to whether the cost of 12 more pipes, etc. would be more or less expensive than the price of the *repeating* relays. I therefore believe that the *Spire Flute* has 109 pipes.

So, all stops on the Echo organ have 61 pipes-per-rank, except the three mentioned above and: *Violone* (32'-4') and *Clarabella* (16'-2'), 97 pipes. Each unified reed (*Tuba d'Amour*, *Bassoon*, *Clarinet*, *Vox Humana II*) and the *Gamba* is available at 16'-8'-4' pitches and therefore has 85 pipes.

The **Gallery** organs generally have 73 notes-per-rank, but there are some exceptions. The *Flauto Maggiore* (Gallery II) and *Contra Diapason* (Gallery III), both available at 16' and 4' pitches, have 97 pipes each – 73 notes for each of their registers. Similarly, the *Diaphone* unit (Gallery I) has 85 pipes, or 73 notes for its 16' and 8' registers. However, the *Saxophone* (Gallery IV) has only 61 notes for its 16'-8'-4' registers, a total of 85 pipes (the department's other ranks have 73 pipes).

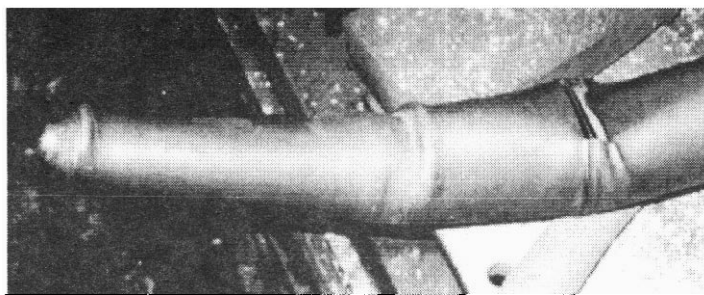
Although most of the Gallery II organ's ranks have 73 pipes, many stop lists indicate that the *Harmonic Twelfth*, *Harmonic Piccolo*, and three-rank *Harmonic Mixture* have only 61-pipes-per-rank. This is both curious and unique in the Auditorium organ, as no other 73-note department has a stop with a 61-note compass. Although, in my calculations, I have indeed shown 61 pipes-per-rank for these three stops, I wonder if they actually have 73. Detailed examination of the ranks in the Gallery II organ is currently out of the question due to the condition of some pipework [see pictures 8 and 9].



Picture 8: These harmonic flute pipes in the Gallery II organ are incredibly heavy (probably weighing four times what one might expect) and those that are longer than about two feet in length require both arms to lift them! The damage seen here seems to be the result of "the domino effect" - whereby pipes have buckled under their own weight and pressed against others which have pressed against others, etc. This sad sight is repeated at the other end of the same chest.

the GRAND OPHICLEIDE

Special Report



Picture 9: A bent *Harmonic Flute* pipe in the Gallery II organ. Note how the metal is *sagging* just above the toe and at the position where it was held by the rack board. Some bending has also occurred at the upper lip. The two lines of solder at the side of the mouth indicate that its second (upper) languid was added via the rear of the pipe after it had been originally constructed with just one.

The only curiosity about the Gallery I organ is that the compass of both the *Diaphone* and *Mixture Mirabilis* is 73 notes but, for the reeds, it is only 61. However, this arrangement is not perhaps so strange if the flues are viewed as part of the instrument's ensemble, together with the Great organ, etc. (it is obvious that the reeds – voiced on 100-inch wind! – are *not* designed to be part of the ensemble).

The **Brass Chorus** is another department of 73 pipes-per-rank. The 2' *Trombone* consists entirely of flue pipes, and is therefore useful for tuning purposes, whilst the three-rank *Tierce Mixture* includes 32 reed pipes in its composition [see picture 10]. Originally, however, these reed pipes formed the basses of the 2' stop and the mixture consisted of flue pipes throughout. It is not known at what stage they swapped places.



On the three **String** organs, 73 pipes-per-rank is again the norm, with the four units which provide sub and octave registers (stops 254 and 265-267) having 97 pipes each. On String II, the *Stopped Flute* was originally to have been a straight 8' stop of 73 pipes, but a handwritten note in the *working contract* indicates its conversion to a unit providing registers at 5 $\frac{1}{3}$ ', 4', and 2'. Therefore, 78 pipes are required if each of these registers is to have 61-notes, or 90 pipes if they are to have 73 notes. For the time being, I have assumed the lower number, since I am not able to prove the higher one.

This brings us to the subject of two-rank celestes, the majority of which are to be found on the String organs (interestingly – or perhaps not – on the seven-manual console, all stop-keys controlling two-rank celestes are located on the left jamb, with the single exception of the Choir organ's *Voix Celeste* stop-key which is on the right). The question regarding these compound celestes is: "Which have ranks to Tenor C only and which go all the way down to CC?" According to the contract and to the majority of stop lists, 16 of the 29 two-rank celestes have 146 pipes (both ranks from CC to c⁵) and 13 have 134 pipes (one rank from CC to c⁵ and the other from Tenor C to c⁵). I counted the pipes in about half-a-dozen of these stops throughout the instrument and found that, in every case, the number tallied with the figures given in the contract. So, armed with this *precedent*, I have concluded – rightly or wrongly – that *all* of the compound celestes have the number of pipes specified in the contract. It may, however, be the case that some of those which I did *not* count may have more or less pipes but, somehow, I think it unlikely.

The five-rank *String Mixture* in the String II organ is reported as having 61 pipes-per-rank and this is the number I have used in my calculations. All straight, single rank stops in the String organs have 73 pipes.

Here, then, are the revised figures, based upon the above findings:

Picture 10: The Brass Chorus's *Tierce Mixture* (three ranks nearest the wall) and Tromba mutations.

the GRAND OPHICLEIDE

Special Report

Department	Voices	Ranks	Pipes	Department	Voices	Ranks	Pipes
Pedal Right	11	11	903	Fanfare	21	36	2364
Pedal Left	10	16	955	Echo	22	27	1896
Unenclosed Choir	6	9	657	Gallery I	4	10	754
Choir	29	37	2792	Gallery II	7	9	621
Great	38	63	4647	Gallery III	6	9	681
Great-Solo (Organ)	13	13	1152	Gallery IV	8	8	596
Great-Solo (Orch)	12	12	972	Brass Chorus	8	10	730
Swell	36	55	4456	String I	11	20	1436
Swell-Choir	17	17	1542	String II	24	37	2658
Solo	22	33	2085	String III	9	17	1217

These figures give a total of 314 voices, 449 ranks, and 33,114 pipes. When the seven melodic and 16 non-melodic percussions are added to the 314 voices, the grand total is 337 stops. These are the figures that will be given in my forthcoming book about the Auditorium organ and although limited space has precluded the inclusion of every stop's pipe numbers in this article, a revised version of the 28-page leaflet *List of Stops on the Main Auditorium Organ* is now available from the ACCHOS. (See Editor's Note at end of article)

As stated earlier on, it is unlikely that my figures are *exactly* correct but, even so, I believe them to be the most accurate to ever appear in print. I stand by them. The *rationale* behind them is both logical and consistent, being based on known facts. They are the result of long and very careful deliberation. Where there has been any doubt, I have usually opted for the lowest possible number, having regard for the stop's compass and its number of registers, etc. In this respect, the approach has been rather conservative, and any movement in numbers may well be upwards rather than downwards (especially in the case of the Great-Solo's Organ division and the Swell-Choir, where I have shown no *extra pipes* for any of the ranks). Nevertheless, I do not fear my figures being proved wrong, one way or the other, and I have to confess that the number of 32,900-plus still lurks in the back of my brain as being the most likely total.

As to the condition of the organ... Well, broadly speaking, there are three categories:

1. Departments that are currently working, i.e. those in the Right Stage chamber.
2. Departments that could probably be brought back into playing order with relative ease. Dennis McGurk reckons that the Left Stage chamber's departments might play if the wind was switched on, but he anticipates a

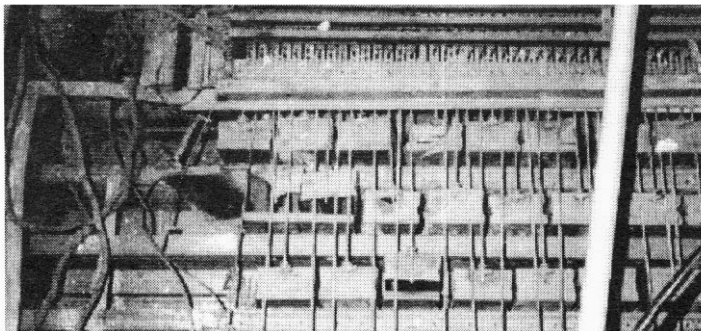
vast number of ciphers and other teething problems. It would probably take months for these departments to *settle down* and get used to being played again, and they would have to be used frequently and regularly for this to happen. Also, the entire Left Stage chamber needs dusting! In fact, all of the chambers, except the Right Stage are very dusty but, generally, the pipes appear to be in a relatively good condition, although they too would benefit from cleaning, new tuning slides, etc.

3. Departments that require a lot of attention. In some cases, pipes, racks, top boards, and even chests may have to be completely replaced. The Gallery II and String II organs particularly come to mind in this regard. From what Dennis tells me, the Fanfare, Echo, and String III organs are in a terrible condition and I fear that much in those departments is already damaged well beyond repair, so replacement is the only solution.

The electro-mechanical combination action for the seven-manual console is located in rooms below the stage, where it was subjected to high temperatures from unlagged steam and hot water pipes. Consequently, it never functioned properly and became so unreliable that it was disconnected altogether in 1936 or thereabouts. Less than a decade later, in 1944, it was wrecked by the flooding that accompanied the hurricane of September that year [see picture 11]. It has not worked since, and any attempt to repair it would be both expensive and, I suspect, futile. In my opinion, it should be replaced with a solid state action, whilst the original mechanism should be retained for interest's sake.

the GRAND OPHICLEIDE

Special Report



Picture 11: Some of the remains of the remote combination action for the seven-manual console.

Finally, here's a progress report on my book about the instrument... The draft edition is now in the final stages of completion and I hope to get it out to the 'readers' soon. Whilst they're 'reading', I will be rescanning some of the pictures and trying to obtain better quality copies of some others. When the drafts are returned to me and I've made the suggested alterations – or not, as the case may be – the finished product will go to the printers. At present, there are in the region of 600 A4-sized pages with approximately 300 pictures. A brief outline of the chapters, etc. is given below:

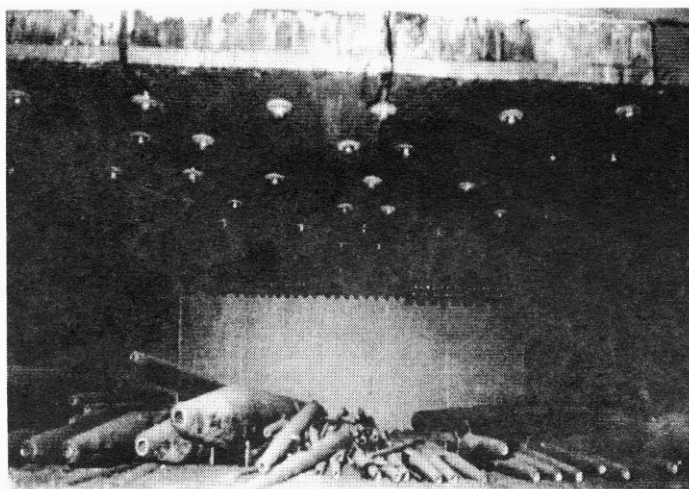
Forward, Introduction & Author's Notes, etc. (approx. 7 pages)

Chapter 1 *The World's Largest Auditorium* (8 pages)

An introduction to the Convention Hall; its construction and features.

Chapter 2 *The World's Largest Pipe Organ* (13 pages)

General information about the original organ (43,000-pipes!) designed for the Auditorium; which companies bid for it; and where it was to be accommodated within the building.



Picture 12: Pipes from some ranks in the String II organ are stored under their water-damaged chests.

Chapter 3 *Still The World's Largest Pipe Organ – But Only Just* (7 pages)

How the instrument's design was reduced in order to meet financial and space requirements. The second round of bids.

Chapter 4 *The Contract* (6 pages)

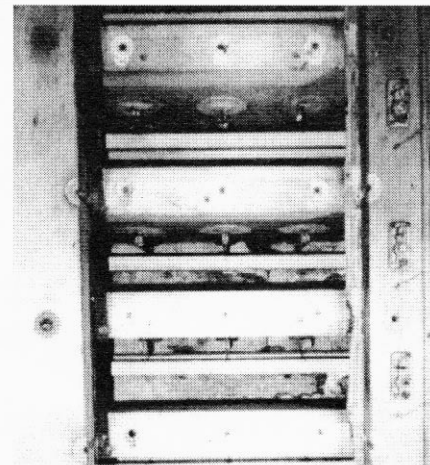
Some details from the contract and commentary upon it.

Chapter 5 *Construction* (32 pages)

Design details; how the instrument was built and what was changed in the process.

Chapter 6 *An Introduction to the Departments* (75 pages)

An outline of the contents of each department and details of their notable features. This section includes photographs of pipes from every rank in the instrument.



Picture 13: Underside of a chest in the String II organ. Some leathers appear to be in reasonable condition, whilst others have obviously been affected by water.

Chapter 7 *The World's Loudest Organ Stops* (8 pages)

Some notes about the design and development of the reeds voiced on 100-inch wind.

Chapter 8 *The World's Largest Organ Pipes* (12 pages)

The story of the 64-foot stop and the various alterations it underwent.

Chapter 9 *The "Pittsburgh Pair"* (3 pages)

A brief tale about the curious origins of two of the instrument's ranks.

Chapter 10 *Alphabetical Stop List* (6 pages)

A quick-reference list. Full details are given in the next chapter.

Chapter 11 *Numerical Stop List* (48 pages)

Contains all known details about each stop, including its location, number of pipes/ranks, scale, wind pressure, tonality, construction details, compass, and available pitches (both consoles).

the GRAND OPHICLEIDE

Special Report

Chapter 12 *Raison d'être & Rationale* (10 pages)

Some of the thinking behind the purpose and design of the organ.

Chapter 13 *A Straight Instrument or A Unit Organ?* (9 pages)

Discussion about the merits and pitfalls of unification as applied to the instrument.

Chapter 14 *The Seven-Manual Console* (50 pages)

A complete description, including register list, of the main console, together with construction and design details

Chapter 15 *The Five-Manual Console* (22 pages)

Complete description of the mobile console, including register list. Also the story of how it was rebuilt and then rebuilt again!

Chapter 16 *Finance and Aftermath* (36 pages)

Includes all details given in the organ's invoices and other documents relating to its cost, together with some commentary upon newspaper reports from the time.

Chapter 17 *Maintenance* (13 pages)

How the instrument has fared over the years. Includes correspondence from some of its curators.

Chapter 18 *The Auditorium Organ in 1998* (24 pages)

Report about the condition of the instrument last year.

Chapter 19 *Midmer-Losh – A Brief History* (48 pages)

The fortunes and misfortunes of the company, including an opus list. Biographies of the Losh brothers and mini-biographies of some of their staff.

Chapter 20 *Emerson L. Richards* (74 pages)

Biography of the man and his work. Details of some other instruments he designed are also given, i.e. Lodge of Elks (1921); Atlantic City High School (1922); Lodge of Elks (1925); Saint Mark's Church, Philadelphia (1926); Convention Hall Ballroom (1929); Richards' Residence (1946); Richards' Residence (1953).

Chapter 21 *"In My Personal Opinion"* (approx. 10 pages)

My own thoughts about the Auditorium organ, both likes and dislikes.

Chapter 22 *Other People's Opinions and Experiences* (5 pages)

What others think about the instrument.

Chapter 23 *Recordings of the Convention Hall's Organs* (10 pages)

Reviews and background information concerning the recordings of the Midmer-Losh and Kimball instruments.

Appendix A *Some Notes Concerning Pipe Numbers* (16 pages)

An explanation of how I investigated the instrument's pipe numbers over the years and why I arrived at the figures given in the book.

Appendix B *The Auditorium Organ's Previous Schemes* (36 pages)

Details of the 43,000-pipe organ, complete with register lists and a stop list similar to that given in chapter 11.

Appendix C *The World's Other Largest Pipe Organs* (3 pages)

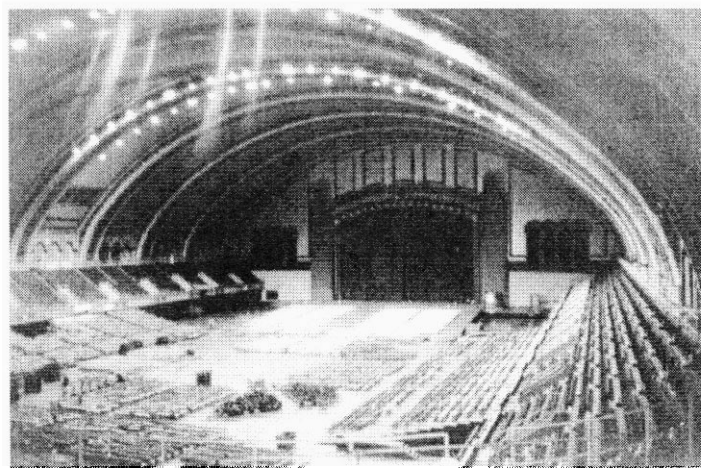
A glance at the Wanamaker organ and at the instruments in the Cadet Chapel at West Point Military Academy.

Appendix D *Table of Pipe Sizes and Pitches* (1 page)

This has been included just for interest and reference purposes.

Glossary of Terms, Acknowledgements, Bibliography, Index, etc. (approx. 15 pages).

My thanks go all who continue to encourage me in this work. I estimate that there are about a dozen more pages to be written, but a considerable amount of research is necessary beforehand. Then, the work of checking *every* detail in the book begins. Nevertheless, I am reasonably confident that it will be available later this year. Thanks for your patience!



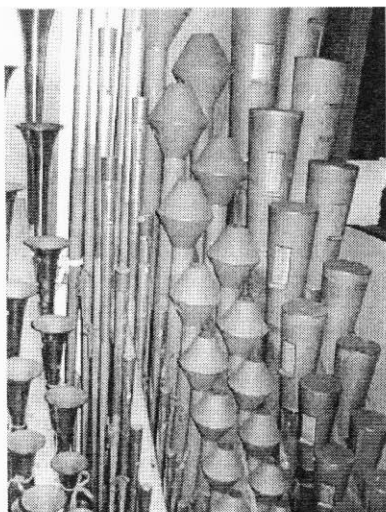
Picture 14: Interior of the Convention Hall's Main Auditorium.

All Photos in this article were taken by Stephen D. Smith during November of 1998

Editor's Note: The 28-page leaflet List of Stops on the Main Auditorium Organ mentioned in this article has been replaced by a booklet titled: **THE ATLANTIC CITY CONVENTION HALL ORGAN** - See the article on Page 4 for more information.

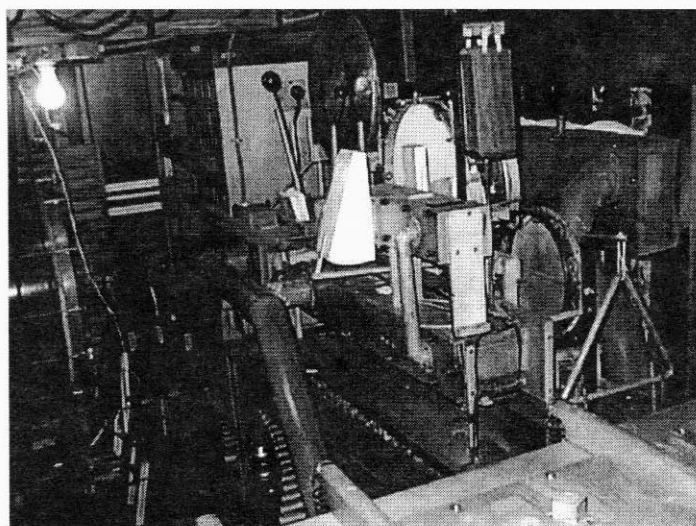
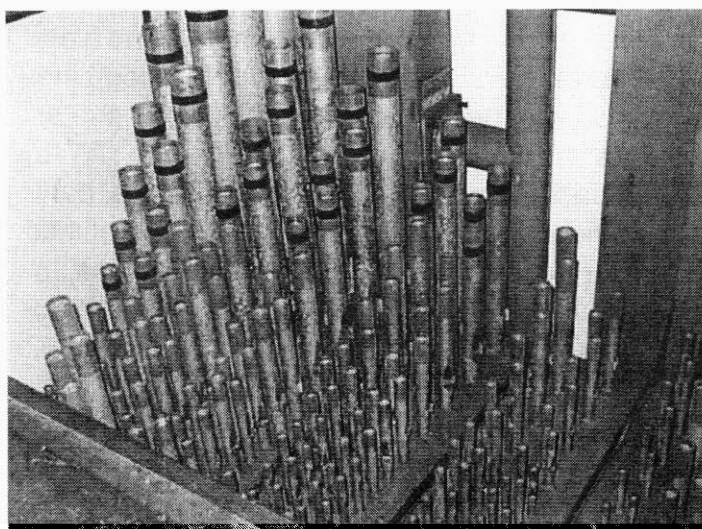
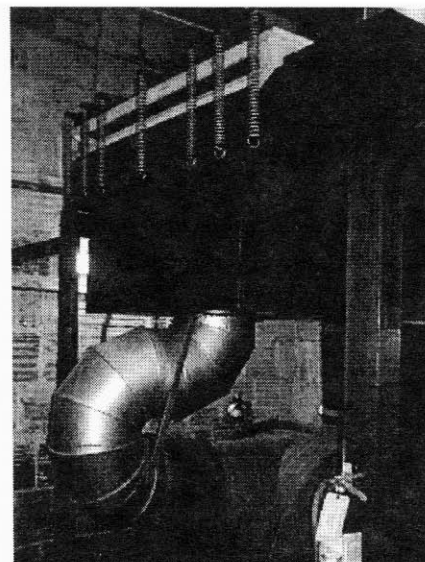
the GRAND OPHICLEIDE

Editor's Note: The following photos were taken by David Scribner in August, 1999 during a visit he and Jack Clotworthy made to assess and survey the condition of the Kimball in preparation for a recording of it later this year.



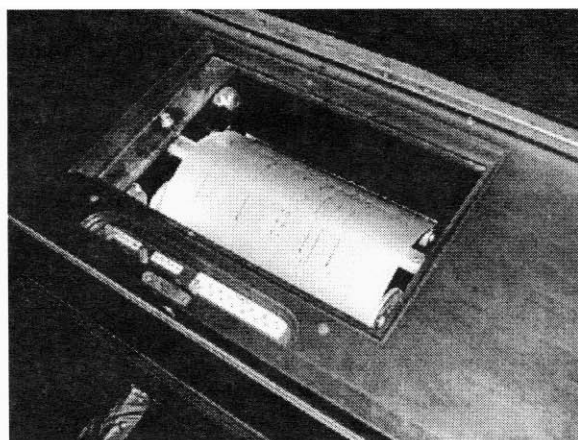
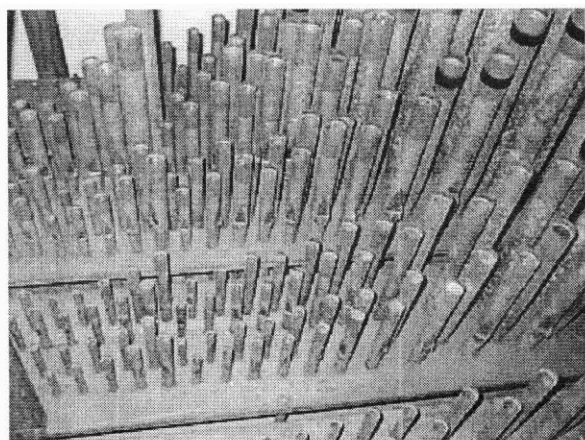
The Brass Trumpet, Orchestral Oboe, Saxophone and French Horn in the Right Chamber of the Kimball.

The Kimball's Main Blower on the parking garage level of the Hall. The Oil-Bath Filter is to the right of this view.



The Percussion Division on the lowest level of the Left Chamber. All the Percussions are here except for the Harp and Chimes which are in the Right Chamber.

Photos above and below:
The seven rank GRAND MIXTURE flanked by the Major Octave and Major Fifteenth in the Right Chamber



The Roll Player, still containing the roll for "Indian Love Call" from the last time it was used prior to having its wind disconnected

the GRAND OPHICLEIDE

Viewpoint

Editor's Note: This column will be devoted to letters, observations, and contributions about the ACCHO from various sources.

(The following remarks were posted to piporg-l on January 8, 1996.):

Times have changed radically since the Atlantic City Convention Hall Organ was built in 1929, and our taste and standards have changed radically, too. In those halcyon days, people loved the sheer exhilaration of size. Consider the fame of the Empire State Building and the George Washington Bridge, to name only two contemporaneous construction projects. Modern concepts of ecology, economizing natural resources and "small is better" would have seemed ridiculous then.

Senator Emerson Richards wasn't smoking anything when he designed the ACCH organ, he merely set out to build the largest organ in the world. And he succeeded -- the instrument was a GRAND success. It all worked, it was all in tune, and it could do things in that cavernous space that no other organ (not even Wanamakers) could approach. One must remember that the Hall seats upwards of forty thousand people.

The basic layout of the instrument was strikingly advanced for its time. It was the organ equivalent of a quadraphonic stereo system with front speakers, side speakers and rear speakers, with each "speaker" being several divisions of the instrument. Shade/shoe selectors could not only couple various divisions to each shoe, but either open *or close* shades as the shoe advanced. Thus, opening a single shoe could move an immense wave of tone left to right, back to front, side to side or diagonally. Manipulating three shoes could rotate the music around the Hall in either direction. These were only a few of hundreds of special effects available on the 7-manual console.

Of course, the instrument was never designed to play classical literature as we know it, but to accompany a range of popular events in the Hall -- political conventions, beauty pageants, football games, prize fights, auto races, ice shows. And yet, in the hands of accomplished artists like Charles Courboin, Firmen Swinnen and Arthur Scott Brook, the instrument did very well with "real" organ music.

Unfortunately, a hurricane flooded the cellars with salt water, ruining the combination action and blowers. The blowers were rebuilt, but the combination action was never restored. Without it, the organ was virtually unmanagable. During WWII, maintenance lapsed, and by the 1950s, mechanical/electrical problems outdistanced the available budget by such a wide margin that tuning was impossible. At this point, Robert Elmore's unfortunate recording "Bach on the Biggest" was made.

Years ago, I talked at length with a number of people who built the organ or subsequently maintained it. While Bill Rosser was still the curator and before some areas were closed due to asbestos, I had the opportunity to go through all the chambers and spend time examining the entire organ. It is an astonishing instrument in terms of design, scope, quality, size and grandeur. Suffice it to say that Senator Richards defined the upper -- and outer -- limits of organbuilding for all time.

Nelson Barden

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Statement of Purpose

The Atlantic City Convention Hall Organ Society, Inc. was formed in 1997 and exists to:
Create a greater public awareness of and interest in the Convention Hall's organs, especially in terms of their future potential.

Promote public awareness of both instruments through newsletters, magazine articles, and recordings; both audio and video.

Arrange periodic organ recitals, and organize regular meetings of ACCHOS members.

Encourage ongoing maintenance of the instruments, and seek funding for crucial restoration at local, state, federal, and international levels.

Benefits include: the GRAND OPHICLEIDE - published 4 times a year containing the latest news and developments concerning both the great Auditorium Midmer-Losh and the Kimball in the Ballroom, and the chance to help support the efforts of the Society in fulfilling the Statement of Purpose printed above.

Yearly ACCHOS membership dues are as follows:

Regular - \$20

Seniors & Students \$15

Contributor - \$40

Donor - \$75

Supporter - \$100

Benefactor - \$250

Sponsor - \$500

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