

4/28 MERGER

It climaxes 5 years of work involving the Chicago Tower Theatre, the Pittsburgh Stanley and the New York Hippodrome Wurlitzers.

Story by George Allen
Photos by George Timanus

George Timanus steadies Diaphone pipe as George Allen works end into shape with length of iron pipe.

PART I

Knowledgeable organ enthusiasts know that although Jesse Crawford played the big Chicago Theatre and the New York Paramount organs, he laid out the specifications for just one style of Wurlitzer — the 4-manual, 20-rank Publix No. 1. Only 25 of these superb “\$100,000 Mighty Wurlitzers” were built over a short 6-year span, the most famous one probably being that in the Oriental Theatre in Chicago. Others would include the Balaban & Katz Tower Theatre at 63rd and Blackstone in the same city and the organ in the fabulous New York Hippodrome. Both were shipped in 1926 and both eventually played an important part in the organ this article is concerned with. Then there was that 27 ranker out in Pittsburgh — but let’s start at the beginning.

It all began back in the late 60’s when I pulled the plug on my Hammond and put it up for sale. Having been bitten — *attacked* is a better word — by the theatre organ bug I

set forth in search of a Wurlitzer. Many shadowy figures were seen during those days in organ lofts around Manhattan and Brooklyn, scurrying up and down iron ladders, and I was astonished to discover that the majority of these buyers came from California. To this day I swear most of the organs in New York wound up in the San Fernando Valley. I never did find a package deal. That's where you simply unhook an organ, move it to its new home, give it a face-lift and hook it up again. In fact, I spent the next few years just buying and selling components. Yet it was an important step in the right direction because I was able to collect many unusual pipe ranks and percussions, many of which are virtually unavailable today.

Then, finally, a series of events took place starting in August of 1967, when I heard about a fellow who had a hand in the removal of the New York Hippodrome Wurlitzer. I was to follow many false leads (a story in itself) before I eventually drove up that long driveway to the owner's home. After weeks of negotiating I finally made a deal. The organ wasn't complete and he wouldn't part with the console or relay because he planned to use them in an electronic setup. But what I did get became an integral part of the present organ.

My next break came in Chicago. The Tower Theatre, originally a big neighborhood house seating 2,995*, was deteriorating and slated to come down. It housed a 4/20 Publix No. 1 "Crawford Special" which was to be broken up and sold, first come first served. By the time I arrived some parts had been sold but I was able to get the console and the balance of ranks I needed to complete my planned 4/20 organ. The console still lay in the pit under a heavy coat of dirty cream paint. Underneath the paint was the highly desirable paneled mahogany case with no ormolu ornamentation. And most important, it had not been vandalized. To continue with this Tom Swift story we now go to Pittsburgh, a great city that once boasted many movie palaces. One of these, the Stanley, housed a 3/27 Wurlitzer that was a sister to the one that was

in the Panama Hilton hotel (out of the Warner theatre in Atlantic City) until recently, as well as the Stanley Theatre in Jersey City. These three 27-rankers were the largest 3-manual organs Wurlitzer built. Eventually, I obtained the relay and a selection of pipe ranks and percussions from the Pittsburgh organ which was being dismantled. All the foregoing required a lot of time, travel and money, but the rewards were great.

Although the Publix No. 1 console was designed for 20 ranks there was ample space on the horseshoe for extra stops. I wanted to increase the number of ranks in order to broaden the organ's range of tone colors, and this was accomplished by eliminating a few of the original ranks and adding those from my collection. Non-theatre low pressure pipes have been avoided. For concert work such as ours, I believe anything more than 28 ranks begins to get top-heavy and unwieldy. This is the

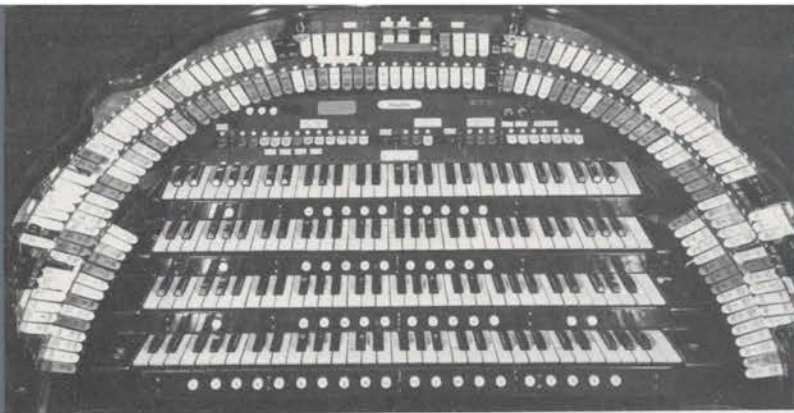
ultimate size and nothing more will be added. At this point let's compare the old and new stoplists.

Note that Crawford's specification called for two matched Tibias, two Voxes and two Solo Strings ("matched" means voiced together and usually in different scales) but no Posthorn. "To protect the patrons", he once explained. I sold the Dulciana and the overpowering Tuba Mirabilis, which might be fine for a theatre but not for a studio. The Main Chamber Solo String was joined by the Solo String from the Solo Chamber. The later has been revoiced as a Celeste. These ranks were then extended down to 16-foot CCC with a lovely large-scale Kimball Gamba octave. A very rare high pressure Wurlitzer Doppel Flute was added. The Orchestral Oboe was brought over to the Main from the Solo division and a Skinner French Horn on 10" wind, from the notable Trenton Cathedral, was in-

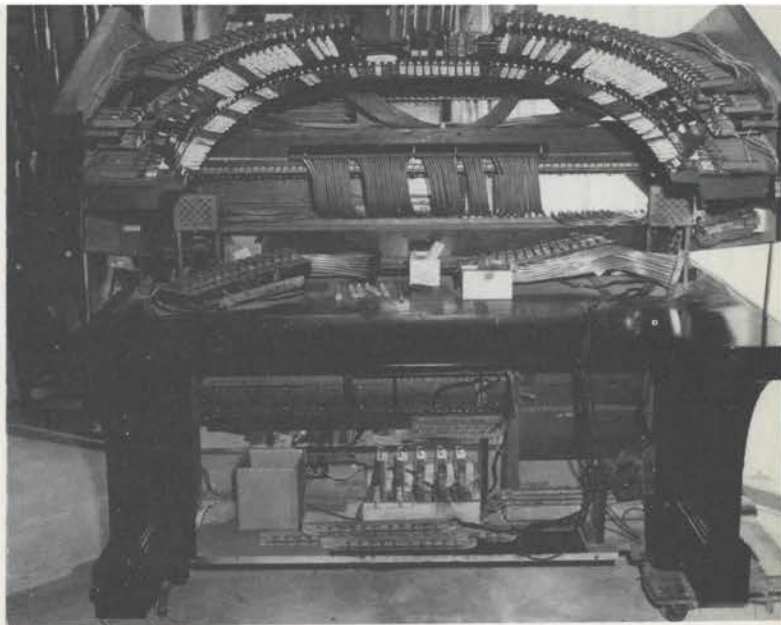
COMPARISON

Original Publix No. 1, 20 Ranks		Revised Wurlitzer, 28 Ranks	
MAIN		MAIN	
1 Tuba	16-4	1 Open Diapason	16-4
2 Concert Flute	16-2	2 Concert Flute	16-2
3 Open Diapason	16-4	3 Tibia Clausa I	8-4
4 Tibia Clausa I	8-4	4 Solo String	16-4
5 Solo String	8	5 Solo String Celeste	8-4
6 Viol d'Orchestre	8-4	6 Viol d'Orchestre	8-4
7 Viol Celeste	8-4	7 Viol Celeste	8-4
8 Clarinet	8	8 Clarinet (Gottfried)	8
9 Dulciana	8	9 French Horn (Skinner)	8
10 Vox Humana I	8	10 Vox Humana I	8
		11 Horn Diapason	8
		12 Orchestral Oboe	8
		13 Quintadena	8
		14 Doppel Flute	8
SOLO		SOLO	
11 Tuba Mirabilis	8-4	15 Harmonic Tuba	16-4
12 Brass Trumpet	8	16 Brass Trumpet	8
13 Tibia Clausa II	16-2	17 Tibia Clausa II	16-2
14 Oboe Horn	8	18 Tibia Plena	8
15 Solo String	8	19 Oboe Horn	16-8
16 Orchestral Oboe	8	20 Kinura	8
17 Kinura	8	21 Saxophone	8
18 Saxophone	8	22 Vox Humana II	8-4
19 Quintadena	8	23 Post Horn	8
20 Vox Humana II	8	24 French Trumpet (Gottfried) ..	8
		25 Violin	16-2
		26 Violin Celeste	8
		27 Cello	8
		28 Musette	8

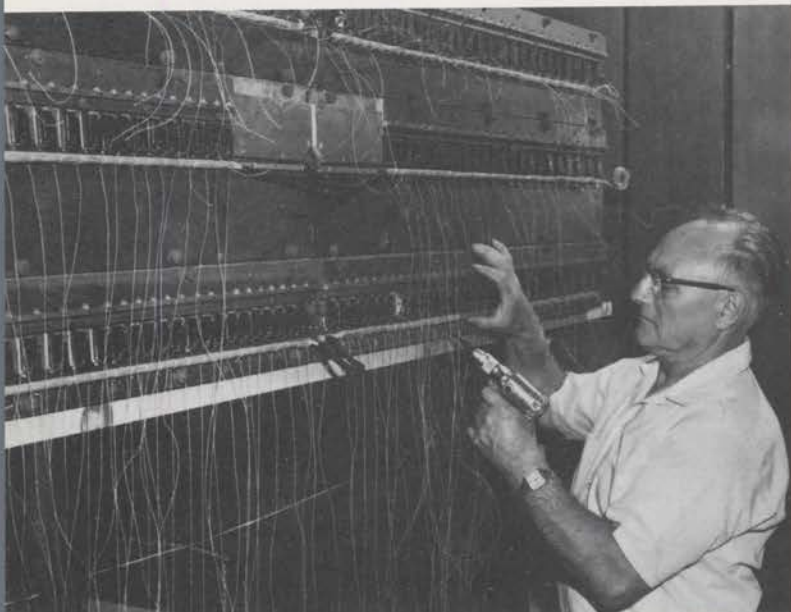
*By comparison the Chicago originally seated 3,869 and the Tivoli 3,414.



The Publix No. 1 console originally contained 173 stop keys and 44 were added to accommodate new ranks, making a total of 217. A distinctive Crawford touch: 20 pistons on bottom rail and 10 pistons each on top three rails, others are cancels. A new top was made of 1 1/4" solid mahogany with unusual cut-out traced from Chicago Oriental Theatre console.



Console in rebuilding stage after being completely torn down. New stop keys are being installed after re-engraving and polishing. Combination action setter boards at rear contain 2,210 switches. On lower bottom board is five electric cancel switches. Console is on wheels to facilitate work.



Countless hours of time were saved in wiring with the use of this professional wire wrap machine operated by Bob Lent. Nearly all cables for entire organ were made on a home made cable machine with #28 DCC wire and wrapped with friction tape.

Relay room in basement was scene of hectic activity for many months. 1st and 2nd touch relays in rear, surmounted by small Tibia mutation switch (note blower starter switch). Four switch stacks at right, pizzicato relay at left. Behind camera is special relay (1st and 2nd) for fourth manual. Left to right: George Denham, Ron Oberholtzer, Bob Lent and Ed (Tonawanda) Dornfeld.

Standard 99-wire organ cable was used in underground ducts from blower room to relay room, above. George Allen leans over 2nd touch relay as Bob Lent separates wires for junction boards. Ed Dornfeld, foreground, at one time worked for Wurlitzer in the 40's.



stalled. This rank was developed and patented by organ innovator Ernest Skinner and comes closer to that hollow "bubble" French Horn sound than any other make. One of Skinner's early employees was another genius, Robert Hope-Jones.

Next, a throaty Tibia Plena went into the Solo Chamber. The Oboe Horn was extended downward with a 16-foot Fagotto Octave and these ranks were added: a Harmonic Tuba and a Post Horn on 15" wind (most are on 10" and lack that famous bite). Then to strengthen the string division a Violin with a huge 16-foot Contra Bass was installed in the Solo Chamber, as well as a Violin Celeste

and a mellow Cello. And my favorite, the plaintive little Musette. All of these ranks are Wurlitzer. Finally, I added a brilliant Gottfried French Trumpet and a Gottfried "bell" Clarinet replaced the Wurlitzer. Gottfried Clarinets are outstanding and sound their finest when not on trem.

The net result is a well-balanced organ in which either chamber can be used for solo work with sufficient bass in each. In the 16-foot pedal section there are 3 reed and 4 flue ranks, an unusual number for a 28-rank organ. I attribute much of our big theatre organ sound primarily to the foundation of these seven

16-foot ranks — two of which are strings — plus the authority of three Tibias, with the Tibia Plena tuned to Celeste with the Tibia Clausa II in the Solo Chamber.

Caroline and I moved from the crowded New York suburbs to Haddonfield, New Jersey, in 1968 and part of the organ was stored in our basement with the overflow going into a warehouse. After listening to many installations I became more and more aware that the size of the room and acoustics of the environment make or break the kind of sound produced. But the volume of a big organ should not impair the quality of sound. An organ, even

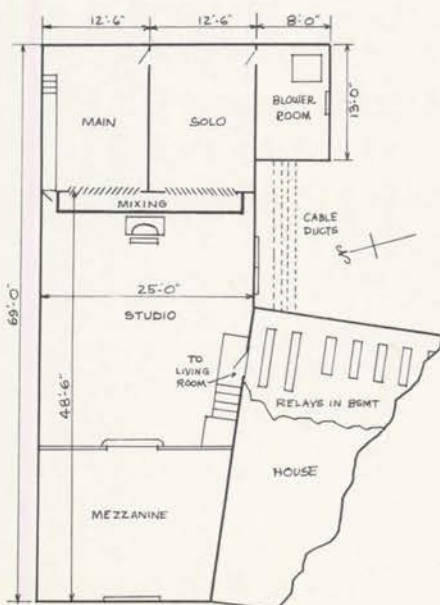
Studio view. Mounted on platform over mixing chamber at rear are Deagan Celeste and numerous percussions. Chamber is open at top to allow sound escape from shutters below. Console rests upon 4" platform. Hardman piano behind Dornfeld, at right. At left are James and Allen. Behind railing and covered, at left, is the Aeolian Duo-Art reproducing piano.



when played wide open, need not be deafening. Therefore, much attention has been given to the design and construction of the studio.

The vault-like chambers are 12" cement block walls and the ceiling is constructed of 8" precast concrete slabs which give a hard, highly reflective surface. The Solo and Main chambers are 13' wide x 17'6" deep and 13'2" high, the latter being determined by the 16-foot Contra Bass pipes on their chest. The blower and cable room is 8' x 13' and the studio itself is 25' wide x 48' long and 18' high at the ceiling peak. The cathedral-type roof is supported on open wood trusses which help break up standing waves, that acoustical bugaboo caused by parallel reflecting surfaces. The organ does not speak directly into the studio but into a mixing chamber, a wall lined with tempered Masonite erected in front of the shutters (the full width and height of the chamber openings) and the ends closed off with access doors. The sound pours over the top of the shutter-height wall. It has proved amazingly effective. Altogether, the studio is "live" but not harsh.

Inasmuch as I have nearby neighbors I had to find a way to dampen the bass frequencies. All exterior walls are 12" cement block and filled with 17 tons of sand. Dick Loderhose said this worked for his studio although one of his neighbors said he could feel the big Ophecleides



through the floor in his basement, the sound waves having traveled via the ground.

I've always been partial to what Johnny Seng calls the "factory new" syndrome, which he isn't, because, he says, a dingy-looking pipe plays just as well as a shiny one. He's right. But I like to see shiny pipes. In fact, there's nothing more soul-inspiring to me than to look into an organ chamber and see a host of golden trumpets and silvery strings under sparkling lights. Going a step further, I wanted the complete organ to look as if it just came out of the factory.

Which brings up the subject of the work involved to achieve that objective. I needed help. Fortunately, our Delaware Valley Chapter's Esther Higgins came to my rescue. She gave me a few leads, which led to others, and soon we had a sizeable crew Joe James, Bob Lent Sr. and Ron Oberholtzer were RCA engineers. George Denham specialized in electronic organ design. Dave Miller was a piano tuner with Steinway, George Timanus an expert photographer hobbyist and Ed Dornfeld at one time worked for Wurlitzer in North Tonawanda. I must also mention young Bob Lent; he knew his way around theatre organs but finally left to join the Marines. Our nightly routine reminds me of the time I worked with Bon Smith and his able crew on the Beacon Theatre Wurlitzer in Manhattan. Late hours, organ talk and lots of coffee. The only thing I missed was the nostalgic atmosphere of the big Broadway house, with its huge drapes rising above the stage into the mysterious indigo gloom. This, one cannot recapture at home.

Organ rebuilding is a never-ending grind. Many have passed through this phase before so I will skip over the usual chores and touch upon those that might interest the reader. For instance, it was Wurlitzer's practice to equip many of their chests with only one tremolo. This meant all ranks on the chest shook in unison. They'd all go "wa-wa-wa" together. By boring new intake and exhaust holes in certain chests, installing wood separators between each rank compartment and adding extra tremos and regulators for each rank, we were able to get random shaking. More

tremolos mean more random sound, a theatre organ rich, vibrant and shimmering. Another factory practice was the 12" to 14" clearance between the regulators and bottoms of the chests in theatre installations. It was sheer murder to squeeze under a chest to replace a magnet with valve rods boring through one's back. Our chest support frames were set to give all chests 54" clearance from the floor. This was done by dropping the chamber floor 4 ft. below the studio floor. Now we can sit upright and work in comfort.

And we made mistakes, too. Such as the time both sets of swell shutters were installed to open inward to the studio center instead of out. We had to remove every nut, bolt and screw, down to the shutter frames, and then put everything back again, reversed. Another time I forgot to move the Marimba into the chamber before the narrow door was installed. Again, it was disassemble on the outside and reassemble on the inside.

I always told the crew that when everything was finished and we pressed the starter button and nothing happened I would dump everything into the river. But the time came when we pressed the button and something *did* happen. It seemed to be raining hailstones in both chambers and the sound rose to a persistent windy crescendo. It took us three minutes to locate the trouble and the following summer to correct it. It was our first big boner.

(To be continued)

In the next installment, the "hail-storm" sound is analyzed and corrected, the organ gets a brand new custom blower, another colossal "goof" transpires, best-sounding locations are sought for the percussions, an electronic string bass is added, also a piano — and finally the "4/28 Merger" is finished.

Correction to the April, 1975 list of Chapter Officers:

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