## An Outline for a Course in Theatre Organ-2

## The Nature of the Instrument

## by John Muri

The theatre organ of the nineteen-twenties was an accommodation to a demand for relatively low-cost music, to scarcity of space in organ chambers, and to the taste of theatre-goers. Initial costs, ranging up to one thousand dollars for a rank of pipes, were high; but the instrument required only one musician who could provide music of any kind, even percussions and soundeffects. One player could effectively substitute for the work of several musicians.

Even though early mechanical instruments incorporated bells, drums, etc., Dan Barton must be given much of the credit for making percussions playable from a console. On his Bartola, a pianist could play an organ melody with his right hand and piano accompaniment with his left.

As theatres became larger, chambered pipe organs were installed. The unit system was readily accepted because of its economy. With increased wind-pressures, ten inches and higher, a small organ could sound as formidable as larger lowpressured church installations. A ten-rank unit organ can be impressive in a large room with good reverberation.

The weakness of the unit organ is its use of a single rank to perform several jobs. Single ranks do not have much variety in their several registers; the upper ranges of a flute do not take on the nature of piccolo tone. Trumpets or tubas in the fourfoot registers are almost invariably shrill: they certainly do not produce clarion tone. Saxophones are unsatisfactory most of the time, changing disagreeably in voicing as they move up octave by octave. Kinuras are quite variable; they are either too loud, too soft, too nasal, or too thin. Kimball made uniformly good snarly Kinuras; Wurlitzer's were almost always thin and stringy. Strings are usually the weakest ranks in theatre

organs; seemingly not enough care was put into their voicing. Tibias have been variable, even though they are the most characteristic stop of theatre organs. Organists sought primarily to have a full, round, airy tone; some wanted a warbling sound. Good theatre organ stops were rare and chancy things; one envied the organist who had well-voiced and scaled pipes to play on.

As for tremulants, theatre organs usually didn't have enough of them. The ordinary six or seven-stop instrument had two tremulants, one for the vox and the other for everything else, including the 16-foot pedal Bourdon, an extension of the flute rank. Too often a tremulant would work well on one rank but perform badly on the rest of the organ. Most attempts at finding a shake that would work satisfactorily for most — if not all — of the stops would fail. The argument about how fast Tibia tremulants should be set have been unceasing. Tremulants usually covered up bad voicing and unmatched ranks. Most of the smaller organs (less than ten ranks) had ugly ensembles when played without tremulant. Furthermore, good, full crescendos could not be built up by imperceptibly increasing degrees. Small theatre organs had great gaps in their dynamic ranges. Clarinets and Oboe Horns might be as loud as the Diapason; there might be no intermediate stop between the Flute and a Diaphonic Diapason.

Not much writing has appeared on the subjects of tonality, voicing, and balance in theatre organs. We shall get improvements in small unit-organ building when theorists and engineers pay more attention to

Mr. Muri's opinions expressed herein are his own and do not necessarily reflect the policies of ATOS or THEATRE ORGAN Magazine. those matters. Why does a good Wurlitzer, Morton, or Kimball ensemble sound different from that of any other? Some of the answers lie in the mechanics of construction. Complete answers will require measurement of the blending of timbres or overtones produced normally and by overblowing, and of the relative loudness of individual ranks of pipes. Little has been published since Herman Helmholtz wrote his "On the Sensations of Tone as a Physiological Basis for the Theory of Music" in 1863. George A. Audsley's chapter on voicing in his "The Art of Organ Building" (1905) testifies to the author's inability to describe what he calls the art (not the craft) of voicing. He criticized the engineers of his time for neglecting the study of pipe-organ acoustics. He could say the same thing today.

One cannot fail to notice the deceptions that theatre-organ designers practiced in their desire to produce impressive consoles. One builder made big three-manual consoles for six and seven-rank organs. Sometimes the third manual was not even hooked up. One builder made a console with two full stopbolsters on which none of the tabs in the top bolster operated anything. Although the extra tabs were labeled with an array of tonal resources, none of them existed in the organ.

Builders never agreed on a uniform system of stop-tab and division layout. Wurlitzer seemed to have reached an ideal layout for their Publix 4/20's (you can find what you want on them very easily), but serious deviations from the pattern exist on at least one of their largest instruments. Most builders put the pedal stop-tabs on the left side of the bolsters; a few put them on the right. Some put solo tablets to the right of the accompaniment; others did the reverse.

Music racks were often placed much too high for comfortable use, just so a horseshoe design of tablets could be unbroken. The racks were usually much too thin to hold enough music for a full featurefilm. To a considerable degree, organists were driven to faking their music because of the inconvenience that poor rack-design caused in actual performance.

Little thought was given to the placing of consoles for organistconvenience. The Chicago Theatre and Radio City Music Hall provide examples of consoles placed on a side so close to one chamber that one can barely hear the other a block away across the auditorium. The placing of organ chambers was also something to howl at; they might be found anywhere. One big one in New York City was placed underneath the stage, where water from an ice show might leak into the chests, and where the sound was choked off from the auditorium when the orchestra elevator rose in front of the swell-shades. Another big one had to have tone-chutes and electronic amplification so that the audience could hear it. Many were placed in small crowded chambers, where attempts by servicemen to get at parts of the organ would necessitate tearing out other parts of the instrument. Percussion and soft stops were placed so far back in chambers as to become all but inaudible, while the loudest stops might be placed right up against the shutters.

Theatre organs are generally unsuited to the performance of works by classical organ composers. There is not enough choice among tonalities to create proper effects and balances. An organ with only one or two sixteen-foot pedal stops cannot deal with the pedal requirements of Bach. The pedal will be either too loud or too soft for the rest of the registration. An organ with only one Diapason must use whatever is available to match the Diapason tone, usually a lone Tuba. Some "legitimate" organ works may be satisfactorily played on theatre organs. The finale to Reubke's Ninetyfourth Psalm is quite suggestive of movie music, and pieces like Will MacFarlane's Scotch Fantasia, Hollins' Concert Overture, and R.S. Stoughton's esoteric pieces will go rather well, but as for items like Deszo d'Antalffy's Drifting Clouds (a beautiful composition) - forget it unless you have about twenty ranks. Small organs can't cut it.

As for the present scene, most of our large instruments are only in partial working order. Inoperative piston mechanisms are strewn across the land. Consoles with stop-tabs that do not bring on what they say they will (for example, an Oboe-Horn tablet that brings on a Post Horn) require special care and create pitfalls for visiting players.

In 1931, a Mr. Elliot B. Spaudling wrote an article, "The Bumbulums", in which he had nothing good to say for the theatre organ. He condemned audience taste more than he excoriated the organists' performances, all in a vehement and patronizing tone. The article has recently been reprinted in a couple of ATOS chapter bulletins. Confronted by these severe criticisms, what does one say? In our next article, "Function in Theatres", we shall attempt a reply and a defense of the theatre organ.



## Heading in the right direction... Destination, San Francisco!

This snapshot, taken in January, 1975, illustrates once again the mutual interest in railroading, which many organ enthusiasts share. The  $1\frac{1}{2}$  inch scale, coal burning, steam locomotive, "Cyclops," one of the largest of the several scales including ( $\frac{1}{2}$  and  $\frac{3}{4}$  inch) which are operated at the Golden Gate Live Steamers, Inc., club loop in Tilden Park, Oakland, Calif., is shown being driven by Ray Weaver, a retired locomotive fireman. Following Ray, Carsten Henningsen, in turn followed by Bill Langford.

Regular readers will remember Carsten as the owner of Ye Olde Pizza Joynt in Hayward, Calif., the originator of pizza house organ installations over ten years ago. Carsten also owns the "Cyclops!" Bill Langford, veteran of numerous regular broadcasts, the ABC Paramount radio staff, and his own show "Portraits in Black and White," uses his imagination and talent bringing out the best in the "Mighty Warfield Wurlitzer," at the Joynt. In so doing, he has become an institution in the Bay Area. To hear Bill and the many other artists and installations in the Bay Area, get on the right track and make your reservations for the 1975 ATOS National Convention, July 15th to 20th in San Francisco, where hot air is put to many uses!