

Homage to ...

Robert Hope-Jones

by Stevens Irwin



This is the concluding installment of a three-part study of Hope-Jones' contributions to the art of organ building.



As Mozart and Haydn once joked over their beer about which one was "copying" the other's compositions, we need not be concerned about Hope-Jones' adaptation of other builders' pipework. The ways of genius always set the course of lesser men. The fabulous Diapasons and Principals of Edmund Schulze (born 1823) have been copied openly by almost every builder since his time, and many reproductions of his flues are in the Midmer-Losh in Convention Hall, Atlantic City. But Hope-Jones outdid the work of all of these other builders, adding his own inimitable type of voicing and vivid coloring. He is as much honored for his tonal work as for numerous breakthroughs in applying electricity to organ action.

Let us discuss his stops. His dream of a 100-inch Chorus Reed in Worcester Cathedral was never to be fulfilled. Four of these, however, were successfully accomplished by Emerson Richards in Convention Hall, especially the Ophicleide, back of the console at *stage-right*, which is still playing. Mention too might be made of the State Trumpet 8' on 50-inch wind at the west end of The Cathedral Church of St. John the Divine, New York. Its loud but life-like tones have been heard by many readers; it is

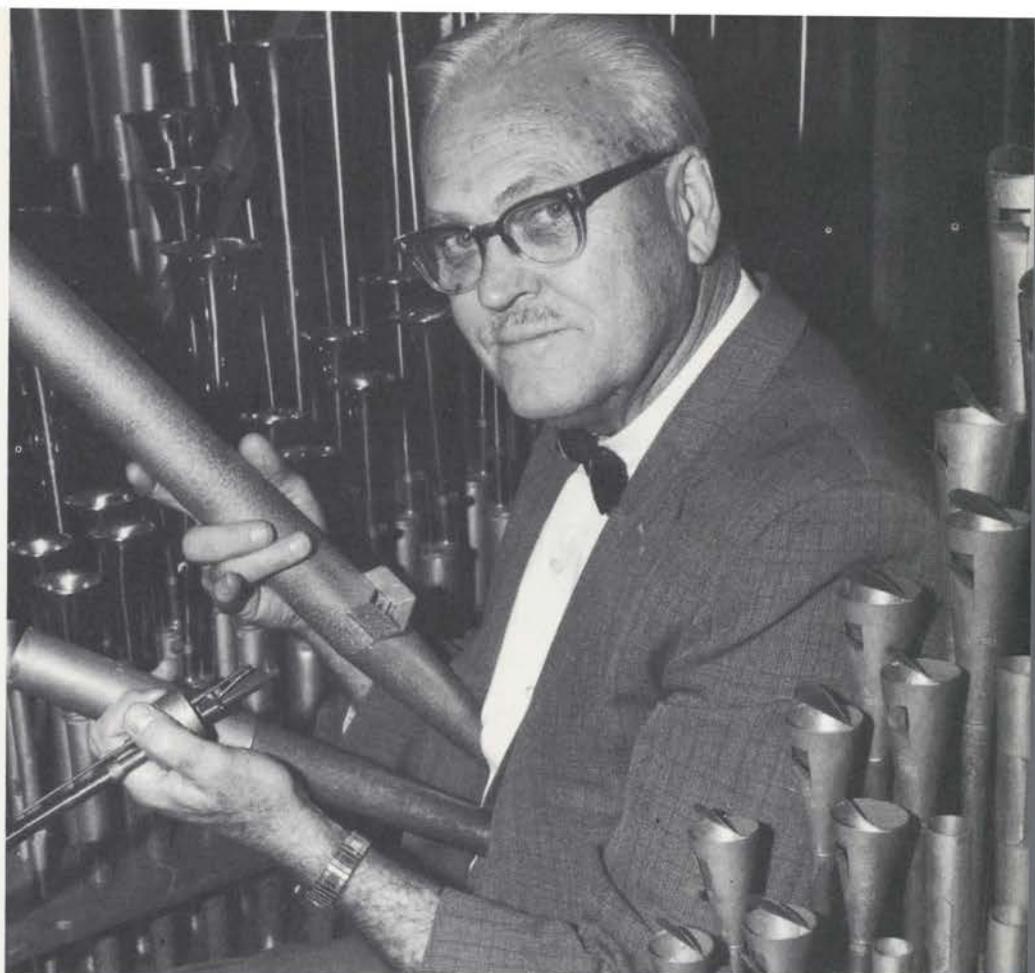
Robert Hope-Jones circa 1908, probably one of his happiest years. Plenty of orders for organs were coming to the Elmira factory and ones already installed had won wide acclaim. The spectre of financial ruin had not yet appeared. The huge shock of white hair had become his American trademark, to be seen at many a meeting, convention or organ dedication. These were the good days. — (Courtesy of the Wurlitzer Co.)

always played at the 11:00 A.M. service on Sunday. It has 61 — 3-ply zinc resonators (tinted silver), that slant slightly upward (18 degrees above the horizontal) in order to keep their sounds directionless. This stop was voiced by Oscar Pearson, now retired from the Aeolian Skinner factory. These famous Reeds were undoubtedly inspired by Hope-Jones' 50-inch-pressure Tuba in Ocean Grove, not far away from either. Voicer Jim Nuttall was one of the pioneers in the development of high pressure voices.

Hope-Jones often included an extremely brass-like Tuba Mirabilis, sometimes unified into a Tuba Profunda 16' and Tuba Clarion 4'. His plump, assertive Tuba Sonora, voiced by E. F. Lloyd, is equally famous. It made a round but very penetrating timbre. Although these two Chorus Reeds complemented one another in timbre, both were rarely included in the same organ. His Ophicleide was quite wide in scale and had both a tremendous fundamental and high train of overtones. Like all orchestral builders he was in love with Horn stops and developed a Tuba Horn that had the round timbre of a Horn but also the power of a Tuba, but still easy to blend with Diapasons and open Flutes such as his Waldflöte. His Trombone, Tromba, and Trumpet were also distinctive. Each had its proper Clarion and Sub-octave, any one being in pedal or manual divisions. However, the sassy but much needed Muted Trumpet 8' eluded him, as it did other builders.

He is famous for his Double English Horn 16' (later, English Posthorn). It managed to be pungent, brassy, and a source of higher partials for other stops all at the same time. His Clarinet and Solo Clarinet were good imitations, but this is the easiest woodwind to imitate in the organ. The Saxophone is the hardest, and no one has ever simulated its "floating" pitches and hybrid tonalities well because they come from different hand positions of the player and variations in breath control while the organ has steady wind. His co-workers were always coming up with a new style of resonator for his imitative Oboe, Bassoon, and Oboe Horn. He delighted in making Vox Humanas with special

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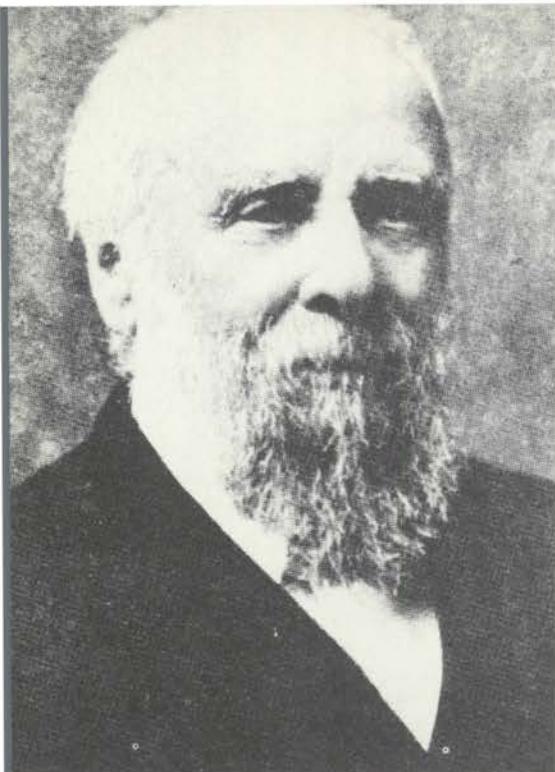
J. Lee Haggart served his apprenticeship with the Robert Morton Organ Co., Van Nuys, Calif., just as the rush to meet orders for theatre organs started. Starting with an installation crew, Lee helped put 28 organs in California theatres, restaurants, hotels and residences (e.g. the Morton in the Chaplin residence on which Charlie composed the scores for "City Lights" and "Modern Times.") It was his later association with James Nuttall which sharpened his voicing technique, a skill he practices to this day. Since his retirement as an electronics engineer, his pipe shop has become a Mecca for those with pipe problems. Lee is shown here in the Buddy Cole "Wurlitzer-Morton" solo chamber. — (Stufoto)

vowel cavities on their tops that uttered the *aa*, *ee*, *ihh*, *oooh*, and *uuu* we hear in speech. Such formant juggling has been done by General Electric with electronic gadgets, also.

Lee Haggart, an associate of Hope-Jones' voicer, James H. Nuttall, told this writer that Hope-Jones intended his Kinura to be a brilliant top for his numerous Viols and Muted Viols. He also regarded its harmonic richness as a "reed mixture" stop and so used it. As certain pipes of this short-tubed Reed can go up to even harmonic No. 85 or 90, no one will dispute its ability to make even Viols and Reeds more bright. A few examples have had quarter and eighth-unison tubes, even capped. Some of the Regals of ancient German builders had tubes much shorter than this, some with pressure cells but no resonators at all, such as the Physharmonika. But most Kinuras look like very short Horn resonators without caps, extremely wide in scale. Dan Barton placed three in his Chicago

Stadium organ on their own little chest.

As early builders knew, Hope-Jones' thundering Diaphone was quite hard to adjust mechanically because so many parts had to be put "in sympathy" with one another. Tension of the beater's spring must accord with weight of air in the tube, scale at top must be in resonance with size of "throat" at bottom of tube, and pressure must agree with air volume at the boot. It is too bad that Hope-Jones did not live long enough to hear the (hooded) 64' specimen in Convention Hall. It has full-length wood resonators of 27 x 27 inches square at the top of low CCCCC, is on 35 inches of wind, and unified with 85 pipes to the rank. It makes a profound Sub-Quint of 42 - 2/3'. This deep Quint reveals in itself one of the glories of unifying a rank of pipes. The low pipes speak instantly, even with a staccato touch, but it is more penetrating than loud. It can be heard and felt on the bottom of all



Henry Willis I, was the great builder of English cathedral and concert organs between 1845 and 1898. The fiery reeds and unrestrained "upperwork" of his earlier instruments were much tamer in his later work. Hope-Jones was deeply impressed by Willis' contributions to the art. — (British Museum Photo)

455 ranks. Hope-Jones made several 32' specimens, two in his Denver Auditorium masterpiece, the larger one unenclosed. Many builders have improved his beater mechanism. John Compton of London made Diaphones of String, Diapason, Flute, and Reed pipes which were excellent examples of each type of tone. Hope-Jones intended his Diaphones to be a variety of Diapason. They have been carried up to the note of treble C, one octave above middle C, which requires the beater to put out all of 523 cycles per second! The 8' stop exists on several organs on manuals!

A word on unified organ scaling of pipes. It has varied a lot, but the many 4', 2', and 1' derivations require treble pipes to be larger in scale than mid-range. This adds weight of tone and a sense of the dramatic. Scales were laid out in variable relative values. Scale changes were introduced at certain bass and treble notes, as bass BB below tenor C and treble G. Each builder had his own. Some, like the Concert Flute, progressed purely geometrically without changes.

The midrange of the Tibia Clausa exhibits its best features. It is sweet and gentle on the ear, yet permeates most combinations. Hope-Jones' speci-

mens were not the biggest in scale because he knew that very large pipes produce sounds which are cloying on the ear. The Tibia shocks the ear by having almost no prominent partial tones, yet being at the *mf* to *f* dynamic. It also speaks quickly, like most reeds, yet lacks the many overtones of the reeds. The ear catches this, and accepts it as a solo tone. The ear knows at once that the Tibia is sympathetic to the song it is "singing."

Nor do Tibia pitches anchor securely in the mind, because they lack overtones to confirm those pitches. In "romantic" and popular melodies this is an advantage, psychologically, at least. The tremulated tone seems to hover pleasantly around its pitch, but does not clash with a bright accompaniment; it has too few partials. The softer Mezzo Tibia, Tibia Minor, Echo Tibia, Tibia Mollis, and Doppel Tibia (with opposite mouths) are variations of this famous timbre. Muted Violas, Echo Diapasons, Gemshorns, and a Quintadena Celeste provide good accompaniments for its melody notes. A Solo Tibia Clausa may be on higher wind but its dimensions are likely to be the same as those of the regular Tibia, except for a higher cut-up of mouth. A few builders made gigantic pipes, much larger in scale than those of Hope-Jones, but these sound best in a huge auditorium. The Master also made many Gedeckts and Echo Gedeckts, some quite small and diminutive in sound. His Quintadena and its Celeste rank send forth plenty of 2-2/3' and 1-3/5' overtones from the 8' stop. This makes a compound tone that suggests his Phoneuma and its Celeste. This metal stop was small in scale and stoppered, but it sounded "stringy" due to its low cut-up and high wind. Many varieties of open Flutes existed in his organs, most unified at 8' and 4', sometimes also at 16' or 2'. Success of all of these theatre-type Flutes depends upon careful adjustment of the tremulants to suit pressure and volume of wind trunks. No amateur can do this successfully. Some trem raise midrange pitches almost a semitone and drop them a half semitone, especially on high pressure. Trem also vary the pitches of overtones as well as their fundamentals. Success in designing Tibias and other Flutes depends upon a subtle sort of sympathy between exact pressure and design of the pipe. Builders often changed pressure

slightly after an organ was erected to obtain better timbres.

Hope-Jones' famous Viols do not beg for attention. They were his special joy. He knew that strings are the mainstay of an orchestra, and he set out to make them as perfect as possible. Those in Denver Auditorium were famous because in the bass they had one-pipe-per-note, in tenor range two-pipes-per-note, in midrange three-pipes-per-note, and in the treble four-pipes-per-note. He made in this organ other patterns within ranks, and even in the same Celeste. The above description refers to only one "rank" and it required very special wind-chests. Organist Dick Hull has said that these Strings were the most realistic that have ever been constructed. They now rest in a warehouse; this organ was dismantled long ago.

Hope-Jones also made unison and octave Gambas, Violas, Muted Violas, and Cello Celestes, as well as Dolce and Duiciana Celestes at 8' and 4'. He muted his Viols by tapering them to a slender opening on top of the pipe. This softened the pipe, wiped out most of its even-numbered (warmer) partials, and accented its 1-3/5', 1-1/7', 8/9', 8/11', and 8/13' components, speaking of the 8' unison stop, and in terms of stop pitches. As string-toned pipes were usually of block tin, this contributed to their brightness, although the narrow mouths also cut out a few "highs." Wedgwood says that these Muted Viols had the most beautiful tone imaginable — deliciously stringy — and without horn-like or rough qualities. Austin too has made many such Viols, and some can be heard today in their huge organ in the Portland, Maine, City Auditorium. Some are better described by such colorful terms as Viole Mystique or Ethereal Viole. Many were not of the heavily bowed violin (or "frying-bacon") style of timbre but were actually silvery and clean, some even so soft as *mppp* in midrange. Such sounds are among the reasons that we are devotees of the theatre organ. Church organs rarely had such lovely Strings. Nor were they heard on the Classical Organ, save for some post-1925 Kimballs and Skinners. But then they all require enough wind pressure to elevate the partials so that the formant* will not beat with them to any great extent. Again we see

*See the explanatory note regarding "formants" in Part 2.

THE MEN WHO WERE HOPE-JONES is the provocative title of a book being written by organbuilder Lee Haggart of Granada Hills, Calif. The object, explains Haggart, is not to lessen Hope-Jones' claim to fame but to spotlight some of the remarkable associates, the skilled organ technicians which the personal magnetism of the master attracted to his banner. All of those whose names appear on the list are immigrants from England, with the exception of R. P. Elliot. This preview of the organ technicians whose lives Haggart will delve into looks at them during their sojourn at the Elmira, N. Y. Hope-Jones Organ Company factory; in later years most of them distinguished themselves as organbuilders, voicers, pipemakers and erectors in their own rights. Eddie Jones (son of J. Meakin Jones), retired from his lifelong duties with the Wurlitzer Co., assisted in compiling the list.

Theodore Ilse. With Fred Wood, he developed the horseshoe console.

David Arthur. Father Willis-trained reed voicer.

Joseph Carruthers. Organ design engineer, pipemaker and voicer. Was later head voicer for Kimball.

James H. Nuttall. Was Hope-Jones' head voicer. Had a Masters' Certificate in voicing and 20 years experience in England before emigrating.

David Marr. Apprentice reed voicer. Later opened his own factory with John Colton in Warsaw, N. Y.

John J. Colton. Flue voicer.

J. Meakin Jones. Plant Manager at Elmira. Was later Sales Manager for Wurlitzer where he compiled the famous Wurlitzer shipping list.

John Hurst. Pipemaker.

James Bolton. Pipemaker, voicer and pipe scale designer.

Ralph Bolton. Reed voicer.
Robert Shreeve. Pipemaker.

Earl Beach. Flue voicer. Later opened a chime and percussion factory.

Fred W. Smith. Headed organ rebuilding dept. Later left Wurlitzer to open his own Smith Organ Co. in Chicago.

H. Badger. Voicer. Later opened his own pipe plant.

Fred Wood. Organbuilder and erector.

Robert Pier Elliot. Tonal designer. Factory and sales manager. Exerted much influence on the unified organ because he laid out pipe scales for Robert Morton and later, Kimball, after the Elmira plant folded.

here a subtle sort of marriage between scale and wind pressure. Ideally, each Celeste requires its own tremulant and windchest. Larry Bray has some beautiful Strings in his Salt Lake City "Organ Loft" instrument, especially in the 16' octave where the bowing can be sensed and the surging of the orchestra felt.

Hope-Jones made other Strings that were wider in mid-pipe than at their ends. This stabilized the tone and prevented "wobbling" and "fluttering" — not altogether undesirable in an orchestral sound — and made them a little louder. But they cost more to fabricate. All pencil-thin Viols take from four to six cycles of the sound wave to reach steady tone, even on high wind, such as 10 to 20 inches. This initial sound makes us think of the impact of the bow! Hope-Jones' voicer, J. W. Whitely, actually made at least one rank of his Viol d'Orchestre that was only 1-1/16 inches in inside diameter of the 8' CC pipe for the Choir Organ of Worcester Cathedral. But most were less diminutive than this classic example.

The first Diapason in a theatre organ is often on the soft side, and the

second one loud. But Hope-Jones made also Horn Diapasons, English Diapasons, Echo Diapasons, Solo Diapasons, Stentor Diapasons, Violin Diapasons, and many others, some forgotten. These he enjoyed unifying into Contra Principals, Octaves, and Fifteenths, occasionally at 5-1/3', 2-2/3', 1-1/3' and 1-3/5'. But mostly he avoided the 2' and 1' stops.

His Hohlflotes, Tibia Plenas, Tibia Duras, and Solo Diapasons all resembled Principal tone because they had few overtones and strong fundamentals. Hope-Jones was very careful to fill up the lower reaches of the train of overtones! This he did to make a penetrating sound that was on exact true pitch. His Tibia Plena 32' in St. Paul's Cathedral, Buffalo, bore the name Tibia Profundissima, perhaps being named by one of his five brothers. The Rev. Kenyon Hope-Jones devised names for such tonal inventions as his brother's Hedeia-phonie, Phoneuma, and Kinura. The Plena in midrange was a warm, velvety timbre that must be heard to be appreciated. It carried solo line as well as it supported loud Trumpets and Tubas in combination. His Dura was

usually at 4' and was tapered slightly outward, except on the back sides of its thick wood forms. It was extremely penetrating.

Hope-Jones also appreciated the Wood Diapason, even at 8' and 4'. It is actually hard to tell the difference between some of his dull Flutes and his Diapasons, either of which might be made from thick metal or hardwood. In no way did they resemble his echo-like Lieblich Geschallt 8'. If you have a rank of these, or of his stopped wood Kalliope 8', guard them carefully. They are more valuable than a Titian portrait. Another stop that was unique in the annals of organ building was his Tiercina. It was a sort of String with a stopper, around the dynamic of *mp* in midrange. It was overblown to sound its fifth natural harmonic, and was of spotted metal. It also sounded a little of the lower 8' and 2-2/3' components, but its noticeable component was the 1-3/5' in the 8' example.

True to his orchestral instincts, he developed many types of Percussions.

James H. Nuttall was one of Hope-Jones' most influential associates. His specialty was reed voicing in addition to being a qualified organbuilder. He lived his later years in southern California. He's shown here voicing reeds for the Mormon Tabernacle Organ. — (From the Lee Haggart collection)



Among these were the Marimba, Xylophone, Harmonic Gongs, Chrysoglott, Sleigh Bells, and Chimes. His rectangular chromatic Saucer Bells were placed in the Ocean Grove organ. They continue to ring as long as keys are held down. His most unusual experimental Percussion was the Hedeia-phon. It consisted of small gongs that vibrated continuously as long as jets of wind from the chest were released by keys. Other stops we haven't discussed were his Viol d'Amour (as he spelled it), Claribel, Unda Maris Sourdine (Muted Viol), Zauberflote, Piccolo, Harmonic Piccolo, Bourdon, Geigen Principal, Echo Salicional, Vox Angelica, and Quintadena.

How can this Michelangelo in Sound be said to have failed? He obviously didn't. It should be said that the financial balance sheet was not one of his stronger points. One of his associates told this writer that author Mark Twain once made a one-hundred thousand dollars investment in the Elmira factory. Others contributed also to his factory and supplied numerous pay envelopes. Yet the factory faced bankruptcy. No doubt his individual style of thinking made him a lonely man, in spite of the efforts of his wife, Cecile Laurence Hope-Jones, who went around covering up his eccentricities and helping out on his projects, not to mention his brothers, who never lost faith in him. A witness has said that Hope-Jones had a pleasant manner, as when explaining the many new stops in his famous Ocean Grove organ, which he loved to do after recitals. Organist Stuart Barrie described him as "intensely interesting, soft-spoken."

But one that is so much in the realms of euphoria must sometimes swing the emotional pendulum in the other direction. Tragically, he ended his life in a gloomy old rooming house. His suicide came in 1914, just before the explosion of theatre organs all over this country and England. But probably he had invented all of the electrical adjuncts to the organ that were needed in his day, most of them before 1900. Certainly he had created a complete catalogue of stops. He probably felt that there was little else for him to accomplish. We cannot understand this genius in tone because we do not think as he did, but we can give him a belated thanks for giving us the machinery and sounds of the theatre organ. □



Don Thompson addresses audience at New Mexico concert.

Showtime In New Mexico

The Showtime on the Mighty Theatre Organ series on the first Thursday in February at New Mexico Military Institute in Roswell, New Mexico, presented versatile organist Don Thompson, who performed before the largest crowd yet to fill Roswell's Pearson Auditorium. The show was the fourth of the New Mexico Military Institute's Cadet Activities Forum sponsored series on the Institute's 3/14 Hillgreen-Lane theatre organ.

Thompson used the Hillgreen to take some 900 concert goers on a musical tour of the world.

Two silent classics, Barney Oldfield's *A Race for A Life* and Buster Keaton's *Cops*, rounded out the evening's three-hour program, which was characterized by an enthusiasm for the show that infected every element of the diverse audience.

Thompson is one of those organists who can claim world-wide fame; he has appeared in twenty countries in concert, cabaret, vaudeville, television

and radio performances.

As previously reported in *THEATRE ORGAN*, subsequent to an initial period of infrequent use, neglect became a factor in the fate of the organ. During the early 60's the organ was completely silent.

Cadet Robert MacNeur came to the Institute in the summer of '71, and began reconstruction of the instrument. With the help of Mr. Wilson, Mr. Jesse Reed, and fellow cadets Dennis Alley and Stanley Gantz, Bob was able to have the organ operable for the talent show of that same year. Recently, new parts have been added and old parts repaired; the Hillgreen is finally alive again. Bob has come a long way with the organ; all his talent and devoted time has been put into the organ during the past two years.

The final concert of the '73-74 series is to be held on April 9 when Gaylord Carter will be featured at the console. □

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