

OWNING YOUR OWN ORGAN

... By G. Edgar Gress

This series of articles on the organ is intended for those readers who, if not especially interested in installing an organ, are desirous of learning the fundamentals of organ construction in terms that can be readily understood and without previous technical experience or knowledge.

Part 1. Avoiding Pitfalls

SO YOU WANT AN ORGAN of your own. Those Crawford and Wright records aren't quite like the real thing. You want to get your fingers on the keys and squeeze the music out—with the Solo Tibia on the second touch.

Speaking as one who's done it, let me warn you: you're plumb crazy! Forget it while there's still time. I don't care if you have a fortune to spend—you won't have when you get through. A home organ isn't just a "Beast in the Basement," it's a monster that lives on daily gulplings of your sweat, blood, nervous energy, happy home life, and bank balance. Any organ nut serious enough about it to want to have his own organ had better be very sure he is that serious before he gets in over his head. Organ work is no fun—it's dirty, back-breaking manual labor for the most part.

Very frankly, if I'd known beforehand just what I was getting into, I probably would never have done it. On the other hand, I've got to admit that there's no feeling quite like making music on an instrument you put together yourself.

What I want to do is to help you avoid some of the mistakes I made and paid dearly for in the process of putting my "beast" together. It was a ten-year job, and knowing what I do now I think I could have done it a little faster. Say in nine and a half years.

My first mistake was to try to turn a pile of miscellaneous junk into an organistic Cadillac. I did it, but I still wonder how. Lesson Number One, then: *Don't fiddle around with unrelated parts.* Wait until you can pick up a complete organ close enough to what you want so that a major re-designing project isn't necessary. Believe me, it's a lot easier to build an organ brand new than it is to build it out of spare parts. I'll never forget the summer of 1948. I spent it rewiring my relay—at 3 switches per 12-hour day. By the time I got through I could see certain advantages in Mr. Hammond's product.

Buying an organ intelligently isn't a simple matter, and a little careful consideration at the right time can save literally years of extra work later on. As a general rule it's better to get an organ from its original location. Make sure all the major components are intact and that all the pipes are there. Most important, avoid any signs of water as you would the plague. There's only one place for watersoaked chests—the junkpile—and building replacements gets to be a job.

Never mind about the console and the blower. Both are replaceable. The stuff in the chambers usually isn't. Consoles for any normal theatre organ can always be had from firms specializing in selling such organs to churches—usually with new consoles. Blowers are a drug on the market.

Don't worry about dust and dirt, or about the condition of the leather. Any leather dating back to the 1920's is past due for replacement anyway. The main thing is that all the major parts in the chamber should be intact. Missing pipes, even, can always be replaced by sending samples to a good pipe shop, but this can get expensive and in some cases it pays

to dig up a complete used set. Relays and chests of the right size and design are another matter.

Assuming your theatre manager is willing to sell—what should you pay? That depends on the circumstances, but I've seen 20- to 30-rank Wurlitzers go for \$1000 or less and have myself bought whole organs for \$75 and \$25 respectively. When you stop to think of the labor cost of renovating a 30-year-old organ, it's easy to see why few professional organ men will pay anything at all for one. As a generalization, it would be safe to set \$100 per rank as the absolute maximum, even for an instrument seemingly in perfect condition. But you can figure on spending that much again for supplies and various other expenses before you get through.

What Next?

So you've bought an organ. The next step is to get it home. Normally the place to begin is with the pipes. These are the only really delicate items and the faster they're out of the way the better. Get some long boxes and plenty of newspaper, the boxes carpets are shipped in are fine, and pack each pipe individually. The top octaves can be rolled in sheets of paper.

Zinc and wooden basses usually have to be handled individually. Often one big pipe can hold two or three smaller ones. It goes without saying that handling pipes, especially large ones of tin or spotted metal, is very touchy business and you have to be sure to pack them so they won't be pressed out of shape while being stored.

It's a good idea to measure the exact distance the longest pipe at each end of the chest stands above the rackboard. Then you won't have to unpack the pipes to find out how much room to allow. Except for the offset basses, the last thing you'll do in the reinstallation job is to put the pipes back on the chests.

Ordinarily the next job is the wiring system. Cables should be clipped off or unsoldered wire by wire at the junction pins where they enter the chests. Since each wire is tied off at the proper place, all you have to do is tag each group of wires and save yourself hours of cable-ringing later on. With any luck at all it is usually possible to pull the complete cable for each chamber back to the relay room in one piece. If there's a junction board in between, you can leave it alone and disconnect the relay end. In any case, remember that cables are invariably tied off in order. Tag everything and it will be easy to put the wiring back intact, saving endless work with a battery and buzzer. Try to leave one end of every cable alone. Disconnect only the easiest end and take it out along with whatever it's attached to. The big ground wires need not be kept in any particular order—just roll them up for re-use.

The relay, depending on the size of the organ, may be in a separate room or in one of the chambers. Sometimes a small one can be taken out in one piece, but usually the key relays and the switchboards have to be separated. The trick here is to avoid disconnecting the wiring between the two, which is

the most complicated in the whole organ. Notice that the cables from the key relays run only to the stop switches on the switchboards. These switches are made so they can be taken off the board, cables and all. As you unmount each switch, tape a piece of heavy cardboard against its contact wires for protection and finally pack the whole set of switches into a box. The switchboards can now be detached as soon as the stop action wiring is disconnected. In like manner, disconnect the ground and feed wires and your relay is ready to go.

Next go downstairs and pull the console cable out of its conduit and you're ready to take out the console. Usually you'll find that the whole outside shell comes off, as does of course the pedalboard. This makes the lifting job a little easier. But in any case the console is probably the largest and heaviest single item you'll have to worry about. Often a console will go out of the theatre all right but not fit into the doors of a house. In that case you'll have to do some dissecting. Most consoles of the horseshoe type divide into two sections at the sill, but it isn't easy and requires much careful disconnecting of wiring. With the console goes its air regulator and as much of the air duct as you have use for.

The only other item outside the actual chambers is the blower. This is ordinarily too heavy to handle in one piece. By taking the motor off and the fans out one by one you can save a lot of grunting and groaning. But don't forget the order in which the fans go on the shaft and their exact placing on it, both ways. Dismounting the action-current generator is obvious enough. Make sure the power is turned off and then disconnect the starter unit and switchbox. Finally, pull out the generator feed wires and the starter cable running to the console. And don't forget the padding under the blower or the fabric sleeve on the wind outlet.

Now only the chambers are left. Make up a diagram giving the location of the various chests, reservoirs, and air ducts, and number and mark everything in sight. Then start dismantling the wind ducts running to the offset chests and percussions. These can then be taken out one at a time in whatever order is most logical.

If the manual chests can be taken out in one piece, so much the better. Sometimes it's easier to take off the bottom

and top boards. Naturally these must be carefully handled as all the pneumatics and valves will be exposed. After all the building frames and wind ducts are taken apart, the reservoirs and their windtrunk come out as a unit. Make a note of which springs went with each reservoir. Finally pick up the floor frames.

Unscrew the action from each set of shutters after unhooking the motor pneumatics. You'll find that each shutter comes out separately, but don't lose the ball bearings or the bushings. Finally the frame of each set can be unmounted and taken apart at the corners.

Salvage as much of the blower pipe as you think you'll need. This stuff looks quite formidable but comes apart easily with a little pounding at the soldered joints. Save a good collection of the elbows and any other odd fittings for future use.

One final word about handling organ parts. Patience and common sense are your best assets. Organ chests aren't lumber and the less banging around they get the better. Delicate valve wires are usually sticking out on one or more sides and these must be very carefully watched and not allowed to bump against anything. And your final installation will look much nicer if you avoid scratching the wood as much as possible. Old blankets and burlap are useful in this connection.

Ordinarily the contents of any organ chamber can be taken out through the trapdoor usually provided in the floor for service access. If necessary such a trapdoor can be enlarged somewhat. Often organ chambers open directly onto the stage—several stories off the ground, with only a ladder for access. In such a case a good block and tackle is the only solution. Getting an organ out can involve some engineering—especially when it was installed through the front grilles and these were then plastered up leaving only a rathole for the tuner to crawl through. Usually you can figure on spending about half a day per rank to get an organ out of normal surroundings with one helper.

Your organ is now home. Your next job is to recondition it and figure out how to install it.

(To be continued)

Odeon Toronto Theatre Revives Organ Interludes

AFTER FOUR YEARS of silence, the 3m/19r Hillgreen-Lane Organ in the Odeon-Carlton theatre, showplace of the Dominion, is again in use for ten minute interludes at each performance.

Bobby Jones, the British Organist, is currently presiding at the modern blonde console. He was the former Organist of the Lewisham Gaumont, also the Gaumont, Tottenham Court Road and the Stratford Broadway theatre, where he was resident. He has recently completed a tour of the U.S. night club circuit, coming to Toronto from Baton Rouge, La.

The Odeon Toronto is Canada's newest major theatre, and is the gem of the Odeon chain. It was opened in September, 1948, with Al Bollington at the Organ, and in the opinion of internationally known authorities is one of the five most distinguished cinemas in the world. The colors of the walls and ceiling can be changed to any effect desired with Thyatron-controlled concealed lighting units. The seats are luxuriously foam filled, and aisles are widely spaced for extra comfort. There is a large mezzanine restaurant, and an art gallery promenade.

A contour curtain is used instead of a proscenium, quite similar to Radio City Music Hall in N.Y., and one section at the right side raises separately to reveal the Organ console, which rolls out on a short track, actuated by hydraulic

plungers. An efficient amplification system permits the Organist to announce his numbers and encourage the patrons to join in the singing.

The console is a modified horseshoe style, with single bolster of all white stopkeys with black engravings, plus a straight row over the top manual. For the number of ranks in the standard two-chamber layout, the Organ is quite disappointing tonally. This is the result of inadequate tone openings from the chambers, as well as the almost straight design. No second touch, suitable bass, or pizzicato touch is used, and the only percussions are chimes, xylophone and Orchestra Bells. There are no traps of any kind. In spite of these difficulties, Bobby Jones is turning in very creditable performances and music-loving Toronto is applauding his efforts.

The management is considering the installation of larger grilles and swell shades, and the addition of five ranks of Wurlitzer pipes. It would be of great assistance to us to have some letters from A.T.O.E. members go to the Odeon Theatre, 20 Carlton St., Toronto, congratulating them for the revival of the Organ interludes and suggesting improvements on the Organ.

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