

produce a work that will provide a rallying-call for national feeling and an inspirational philosophy for a great nation. I dare hope that it will be moving, both when sung or played as an instrumental solo, particularly on the organ. □

## QUESTIONS AND ANSWERS ON THE TECHNICAL SIDE

by Lance Johnson

Do you have any questions?

Send them direct to:

QUIZ MASTER  
And Organ Builder

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**Q.** I have a four-rank unit Kimball organ. In order to get a greater variety of stops, I disconnected the string stop wires from the unit chest and wired them to a four-rank vent straight chest. I would now like to add still another set of pipes. Can I just add the disconnected unit chest to the vent chest and somehow energize the new stop by using the ground wire as the vehicle? Will the use of two magnets simultaneously per note cause any problems?

**A.** I assume you mean to divide your chest wires from the console so one runs to the vent chest and the other to the unit chest. I don't see that this would overload your contacts. In order to shut off the unit chest, you will either have to break the cable with a gang switch, or run your cable right into the unit chest

and install diodes between the chest magnets and negative common. You will then need a relay for the stop action which would have the primary holding coil wired to the stop key and the secondary wired to the negative common. I would suggest a 12 v. DC Potter-Brumfield relay which would be available at most wholesale electronic outlets.

**Q.** Since my organ is in a basement, I have a height problem. If I were to cut an 8-foot pipe in half and put a cap on it, would I get an 8-foot sound? I tried putting a cap on a 4-foot pipe and it refused to speak.

**A.** I do not recommend cutting any pipes in half. Halving the length of an open pipe by the use of a cap will drastically alter the tonal character of that pipe. The pipe will become a quintedena in that it will have a very pronounced twelfth tone speaking with the fundamental tone. My recommendation would be to remount the longer pipes and tube them off their respective chests. Use Orgafelx which is available at a modest cost from Durst Organ Supply, Erie, PA.

**Q.** At present we are rebuilding a 3/10 Wurlitzer in the south of England. On this organ we are putting the bass off-note chests on separate untremmed regulators. I should be most grateful if you could advise me of the correct procedure for setting the regulator valves. I understand this involves adjusting the length of the two flap-valve stickers with felt spacers after initially adjusting the cone valve. We wish to set the Tibia tremulas for maximum "throb" as per your lovely American Wurlitzers. Is it possible to achieve this condition and also stop the regulator being unsteady with the tremos off? I have noticed that on many Wurlitzers that the basses cause wind unsteadiness in the treble ranks taken from the same regulator, particularly on the main chest which has five ranks on one regulator.

**A.** Since you are wisely putting your basses on separate regulators, I can not see why there should be any

unsteady wind in the trebles with tremulants off. There are examples of theatre organs with bass notes winded off manual chest regulators and these regulators then become overloaded.

To achieve your Tibia "throb" I am assuming that your Tibia is being winded from its own regulator. This regulator then, should not be larger than 20" by 30" and should be tremmed with the largest size tremulant. All Tibia notes from 8-foot B on down should be on a separate regulator.

Do not make any further adjustments with the flapper valves or cone valve. Regulator pressure must be established by spring tension only.

**Q.** I am helping install a 2/7 Kimball theatre organ in my friend's basement. The ceiling height is 7' 6". The only way the pipes will fit on the manual chests is if we mount the manual chests 8" off the floor. In order to avoid mitering pipes, I plan to jack the chests off the floor after removing the longer pipes when removing chest bottom boards for service. What do you think of this idea?

**A.** Manual chests that are this difficult to service generally get less servicing. You will find that in order to avoid having to jack up your chests, every time you get a dead note or cipher, you will allow maintenance problems to accumulate which lead to a poorly maintained organ.

Better to raise your chests off the floor at least 14" for easy service access and remount your longer pipes horizontally winding them to their respective chest holes.

**Q.** How much ceiling clearance is necessary over the lowest C of an 8-foot Diapason pipe that is scroll tuned?

**A.** 3 inches.

**Q.** How much ceiling clearance is necessary for an 8-foot Tuba pipe?

**A.** 4 inches. □