

# THE IMPOSSIBLE DREAM

## A POSITIVE CONTROL FOR A WURLITZER TREMULANT

by Douglas Marion and Roy Emison

Of all of the components which make into a complete theatre organ, none is more impossible to predict than the tremulant. Even in the Wurlitzer factory, they caused problems which have never been explained. An old timer with whom I had a fascinating conversation just before he retired in 1972, told of the many balky tremulants they encountered, even on new organs!!! When one would not work, they removed it, and replaced it with another exactly like it, made from the same patterns at the same time, and it would work perfectly! They were made up a hundred at a time and placed on the shelf until needed – yet one would work where another would not.

Organ Societists (they used to be known as enthusiasts) who have attempted to regulate a balky tremulant to their satisfaction, have spent many an hour at the task without success, and many a dollar calling fellow societists to see if a suggestion might be forthcoming that would resolve the problem. Even then success seemed to elude them – the tremulant either died at the wrong time; would run too fast or too slow, never at the right speed; wouldn't start; wouldn't stop; or performed in the most unexpected and seemingly purposefully arbitrary manner.

Until such time as someone has the opportunity to run a comprehensive test on tremulant operation, with complete instrumentation, so that answers can be provided for each problem, a method has been developed to make the pesky things work as they should. The secret is revamping the tremulant to make it a driving device instead of a driven device. To do this, proceed as follows:

**STEP 1.** Isolate the control box wind supply by removing it from the tremulant, blanking of the air passage with shim stock and then replace it.

**STEP 2.** Bore a small hole in one side of the control box, (an inch to an inch and a half in diameter will do nicely) and run a small air line to the control box from a static air supply. (See Figure 1.)

**STEP 3.** Bore out the dowel plug on the bottom of the control box cover, and insert a suitable diameter and length machine screw. (See Figure 2.)

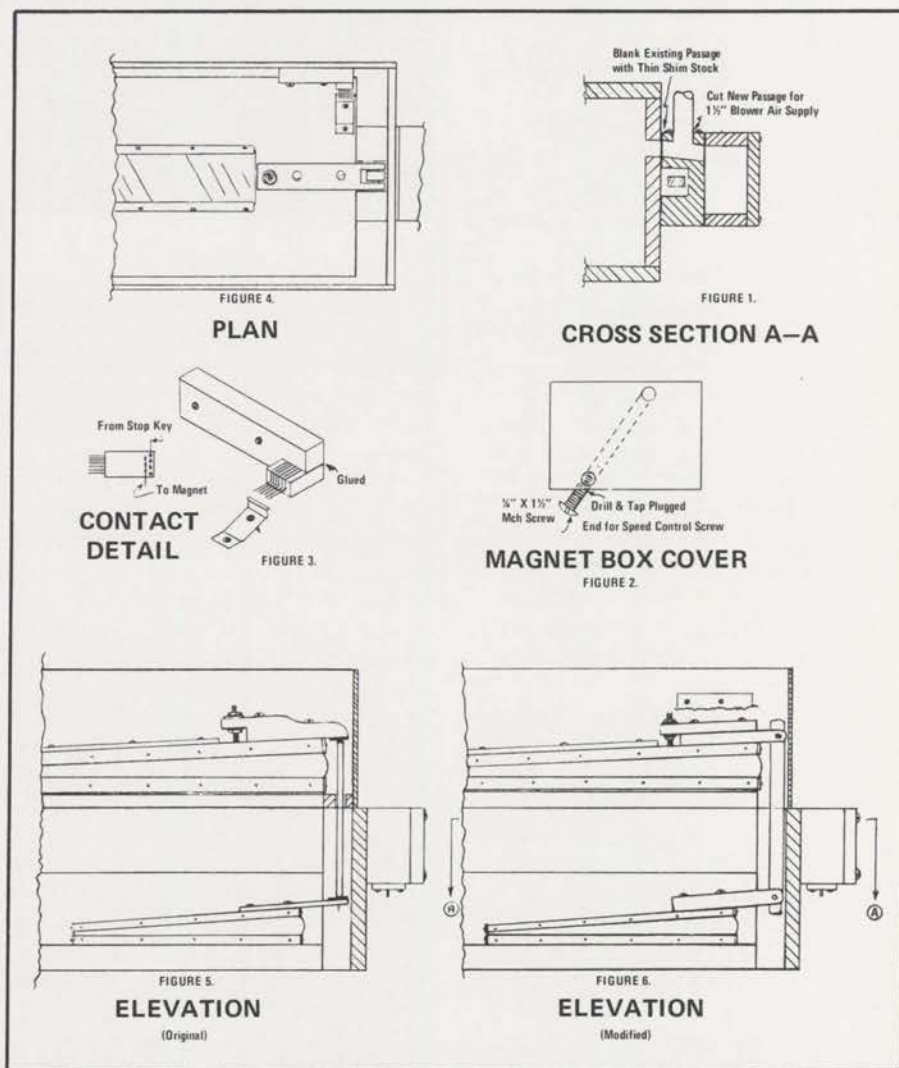
**STEP 4.** Mount a contact block on the side of the tremulant

muffler box. (See note 6.) If no box is provided, as in the earlier models, make a suitable mounting for the contact block (See Figure 3.)

**STEP 5.** Mount a shorting contact on the top member of the tremulant. (See Figure 4.)

**STEP 6.** Wire contact with one side coming from the console tremulant stop key and the other side to the tremulant control magnet. (See Figure 4.)

**STEP 7.** Remove push rod from con-





trol pneumatic located under the tremulant air chest. (See Figure 5.)

- STEP 8. Replace this push rod with a solidly connected linkage which will have to be fabricated. (See Figure 4 and 6.)

The changeover is now complete.

Some notes to consider.

1. Wooden linkage members should be straight grained maple.
2. Pins in linkage should be 1/8 to 3/16 inch round steel with a smooth finish.
3. Pin should be snug in the connecting shaft and free but not loose in the fork member.
4. Use graphite on the forks bearing holes.
5. The linkage will have close clearance in the shaftway and this should be checked before anchoring permanently.
6. Position contacts so that contacts are made when pneumatic is at the top of the stroke and contact maker is at mid-point of its adjustment.
7. If organ is used extensively, provide the heaviest contacts available. In a home installation, a manual or pedal contact stands up well.
8. The space is limited for mounting the flange of the static air supply to the control box so it may be necessary to trim the flange.
9. Weights may or may not be necessary in adjusting the beat. However, the supply valve slide and the venting valve slide may be adjusted through a wide range. The exact speed and depth or intensity should be secured without a tendency for the tremulant to stop. In fact, the tremolo will beat with the regulator wind line disconnected.
10. The speed is primarily adjusted with the machine screw which throttles the wind from the small primary valve to the larger secondary pneumatic. Finer control can be secured by adjusting the contact maker adjusting screw.

This method of conversion has been tried on a tremulant that would not operate correctly, and it corrected the problem most satisfactorily.

Good luck!!!!!!!!!!!!!!!!!!!!



Woody Wise, who began his motion picture career as a theatre usher at 15, has been named managing director of the Harold Lloyd estate in the Beverly Hills section of Los Angeles, California.

The manor house, built in 1929 at a cost of 2½ million dollars, will open to the public for the first time in May of 1973.

Mr. Wise has been involved with movies since the age of 12 when he was given a Keystone projector and some old time films. He began working as an usher for Alexandria Amusement Theatres at 15, becoming the youngest manager in the state when he took over running the Flagship Theatre for the Virginia based chain at 18.

Before accepting the post with the Harold Lloyd estate he was assistant general manager of the Alexandria, Va. movie chain and also owned two theatres, two movie memorabilia shops, and a 16mm rental firm.

Mr. Wise's new position with the Harold Lloyd estate will entail present-

## Woody Wise to Manage Lloyd Estate

ing to the public the myriad features of the 14-acre estate. All of Mr. Lloyd's original furnishings, his vintage autos, paintings by the late actor, player pipe organ, and mementos presented him will be available for public viewing along with the grounds that feature Mediterranean gardens, an Olympic regulation pool, and a children's playground complete with zoo and miniature houses.

Mr. Wise will also supervise the famous 18-foot high Harold Lloyd Christmas tree which is on display year-round. Thousands of hand made ornaments presented to Mr. Lloyd from friends around the world decorate the tree.

Included in Woody's duties will be directing the soon to be constructed movie theatre to house the Ben Hall Memorial Organ.

The Lloyd estate has been used as the setting for numerous motion pictures, the most recent being used as Shangri-la for a TV special of *Lost Horizon*.