

Q Please explain how second touch and pizzicato touch work.

A The normal depth to which a key on an organ can be depressed is 3/8". On an organ equipped with second touch, varying somewhat according to make, the key when depressed about 1/4" meets a stop which prevents the key from being depressed further unless additional pressure is applied. When it is, the key will depress another 1/8" or so whereupon its travel is completely restricted further by the key bed. When depressed to the first stop, a contact is made under the key which operates the usual relay circuits thereby causing the note to play if stops are drawn. When the key is depressed beyond the first stop to the second stop (hence the name second touch) another contact is made which operates through the relays and/or switches to cause other pipe ranks or percussions to play. A separate set of stops is installed for each manual having second touch, and the stops of this group that are drawn will be played when the second touch contact is made. Example:- Accomp. manual registration-Flute 8' and 4'. Accomp. manual second touch registration - Chime. Only the Flute 8' and 4' will play on first touch. When a key is depressed down to second touch the Flute 8' and 4' AND the Chime will play. Pizzicato touch is really a misnomer as no special or different touch is involved in the true sense of the word. An organ equipped with this device has a separate relay for the pizzicato effect. Usually, a coupler from let us say the Solo Manual to the Great Manual is wired through this relay. There may also be a regular Solo to Great coupler which has no relationship to the operation of this device except to make it inoperable if both are drawn together. When the Solo to Great Pizzicato Coupler is drawn, the circuitry passes through the aforementioned relay. This relay has contacts which are normally closed, as contrasted to the regular relay contacts which are normally open. Assuming that you have a fairly light registration on the Great manual, and a heavier registration on the Solo which can be heard over the Great, the Great keys when depressed play both the Great and Solo stops. However, those on the solo are only played for a fraction of a second and then become silent even though the keys on the Great manual are still depressed. The Great registration still plays, however, as the Great stops are playing through the Great relay in the regular manner. The effect is of a pizzicato emphasis on the chord or notes played. If the playing is fast, the effect is nullified, as the key itself is released before the pizzicato relay has a chance to open the Solo to Great coupler circuit. If no stops are drawn on the Great Manual, and the Solo to Great Pizzicato coupler is drawn, the registration drawn on the Solo manual will play momentarily and then stop, leaving the Great keys de-

Questions and Answers

pressed with no sound coming forth. The effect can be obtained with some limitations without a pizzicato relay using only a very simple pneumatic device. If any interest is shown, instructions for making this device can be included in a future issue.

Q What can be done to correct the speech of a reed pipe that almost flies off speech when the tremulant is on?

A This condition can be corrected by an adjustment to the reed tongue. Assuming that the pipe speaks properly when the tremulant is NOT on (which is an indication that the trouble is caused by the air being tremulated), the reed tongue must be removed to make the adjustment. Slide the tuner down and off the tongue, remove the wedge with a knife blade and the tongue out. By slightly increasing the tongue curvature at its TIP, it is nearly always possible to correct this condition. The curvature adjustment should be made on approximately the bottom 1/4 of the tongue length. The amount of the change must be very slight, or the pipe will not speak at all. If you have a reed adjusting block, use it to accomplish the change. If not, a hardwood flat surface and a smooth round steel surface or rod can be used by holding the tongue on the hardwood block, and using the steel rod against the tongue, moving toward the tip of the tongue and pressing down progressively harder as you near the end of the tongue. This is tricky business, and extreme care must be used. Check your progress as you go, and when you think its almost good enough, STOP before you go too far!

Q When I play full organ on my Robert Morton, the tremolos slow down. Can this be overcome?

A From the description in your letter, here condensed, it would appear that your blower is not of sufficient capacity to operate your organ when played with full combinations. You indicate you have raised pressure on several sets, and herein lies your trouble. The horsepower requirements of a blower increase with the cube of the pressure, and you have overloaded your blower by increasing the pressure over the design pressure of the organ. Either get a larger blower (a costly procedure at best), or reduce the pressure somewhat. A fifteen horsepower blower should be more than

sufficient to blow an organ of eleven ranks, when regulated at ten inches, but you have raised the pressure to fifteen. Try dropping pressure to 13" or 14" and you may overcome your difficulty.

Q Which material is the best for re-leathering pneumatics, very thin brown leather, or the paper thin white leather known as zephyr-skin?

A Most organs of early vintage were leathered with zephyr-skin (actually tanned intestine). Later organs were covered with brown leather. It is generally understood that brown leather is the more durable of the two, although this statement will get you an argument quicker than politics! Zephyr-skin was supposed to have been used to help increase the speed with which a pneumatic operated, it being so very thin and pliable. For many reasons, it is recommended that brown leather of proper weight be used, as it is today recognized as superior in all respects to any other material for wear and aging properties. Some of the new plastics have been experimented with, but the age factor has not had time to be proven, and the cost difference is really not great. If you have just completed re-leathering your entire organ with zephyr-skin, do not be alarmed -- many zephyr-skinned organs are still going hard at it after nearly fifty years of constant use!

Q Is it possible to buy lead tubing as used in the interior of my WurliTzer console?

A The tubing in your console is not lead, but pure tin. Remove a piece and heft it -- too light for lead! Lead tubing is available from organ supply houses, but I have not been able to locate a supply of tin tubing such as you are concerned with. This department would be pleased to learn of such a supply being available now. We have tried without success.

Q I recently purchased some replacement stop keys known as type K-4. They appear to be an exact replacement for theatre organ stops, but they do not line up right when installed. What is the difference, and can it be corrected?

A The K-4 stop keys are ALMOST exact replacements, but not quite, and this is your problem. The fulcrum slot on the replacement keys is made at a slightly different angle than the original equipment stop keys and they will not align perfectly with the originals unless you adjust the slot by filing with a jeweller's or pattern-maker's rat-tailed file. This must be done very meticulously, as too much material removed will cause the key to operate improperly -- it will bind or be sloppy in its action. If possible, use original stop keys,

scraping away enough surface to remove the original engraving. Sand with 12/0 sandpaper and buff to a high gloss. If you send old keys in to be re-surfaced and re-engraved, they will take off too much of the surface, and the result is a key that looks unnaturally flat. Specific instructions are necessary to avoid this treatment when submitting your order for re-engraving. Better to clean and buff them yourself!

Q What are the Sforzando Stop Tablets found on some of the larger Wurlitzer organs, some being white and some red?

A This is a device that causes the first one or two shutters of each shutter frame to remain open. Then as any key or keys are depressed for the manual on which the Sforzando stop is located, the circuits of the Sforzando device are bypassed and the shutters return to the normal position. If the Swell Pedal is holding open, let us say, the first three shutters, then the Sforzando device holds open the next two shutters that would be normally closed until the keys are played, and then again the shutters held open by the device close. This is in a sense somewhat like a pizzicato device in principle, but differs in that it is the expression of the organ which is affected and not pipes. It tends to give emphasis to the notes played when the de-

vice is in operation. Not many were installed and they were found mostly on organs built in and around the early twenties.

Q Was C Sharp Minor the true name of an organist?

A Yes. His first name is Charles, we believe, and he was well known throughout the Western part of the country.



Editor George Thompson (left) President 'Tiny' James (right) working on layout of THEATRE ORGAN.

NEW CHICAGO CHAPTER OFF TO GOOD START

C. ATOE's first social of 1962 was a Concert in January at the Elm Skating Club, Elmhurst, Illinois, where a 4/12 "hybrid" reigns forth every night for roller skating. The concert began about 11:00 p.m., with selected specialties by Tony Tahlman, regular Elm organist, who also gave a very informative demonstration of Elm Pipe Organ. Les Strand followed with classical selections and modern jazz, the like of which is very rarely heard on a theatre organ. George Strandt wound things up with old favorites played in traditional theatre organ style, which brought back memories to many of the 200 people present. Climax of the concert was the same selection played by all three organists with notable contrast between individual styles.

After the concert, members and guests enjoyed refreshments provided by hosts Lynn and Bill Fuchs and were welcome to play the Elm Organ. Included in the basic specifications of the Elm pipe organ are such delicacies as a Wurlitzer Tibia, Tuba and English Horn; a Gottfried Kinura, French Trumpet, Open Diapason, Tibia and Vox Humana, a Kimball Diaphone and a Wicks Post Horn custom built for the Elm.

Among those present were Tom Sheen, Violet Bournet, Shay Torrent, and child prodigy Rosemary Bailey.

Nancy Tahlman
Secretary

The PETERSON CHROMATIC TUNER

MODEL 200

This light-weight instrument (only 10 pounds) is designed specifically for tuning organs. Used and recommended by most of America's leading organ builders. Makes it possible for most anyone to do precision tuning.



Greatly speeds up the work of the expert.

For more detailed information, write:

Peterson
Electro-Musical Products

10108 HARNEW ROAD, E.

OAK LAWN, ILLINOIS