

# The Robert Morton V'Oleon

... by Judd Walton

**A description of a curious stringed contraption which is of limited use but interesting nevertheless.**

ONE OF THE little known percussion instruments installed in several of the later Robert Morton theatre organs is a curious stringed instrument called the V'Oleon. The specimen pictured is in the 11-rank Morton installed in 1928 in the ALHAMBRA GARDEN THEATRE in Sacramento, California. The instrument produces a very realistic string tone of 61 notes of 8' pipe pitch. An explanation of the principles of operation will be of interest to the theater organ enthusiast, and THE TIBIA is proud to be able to bring this special feature describing the V'Oleon, complete with photos taken by the author, to our readers.

As will be noted in the pictures, the instrument is about 36 inches tall, not including the case work underneath which houses the suction blower and motor. The strings are not taut, as in a violin or cello, but are coils of high tensile strength steel wire, strung with only a slight tension on them. For this reason the V'Oleon stays in very good tune, judging from the ALHAMBRA specimen. The resonator has strings on each side, tuned diatonically. Immediately under it is a roller, tapered from about 2 inches on the bass end to about 3 inches on the treble end. Directly under the roller, and parallel to it, is a reciprocating bar, with a felt lined notch in line with each string. Essentially that is all there is to the instrument itself, the rest simply being necessary accessories to operation.

The operation of the instrument is unique, though simple. A push rod from each string, extends at right angles to a lever attached to a pneumatic, which in turn is rubber tubed to an orifice on a standard Morton organ magnet. When a magnet is energized by depressing a key at the console, the pneumatic is collapsed, forcing the string over against the turning roller, and into one of the felted notches on the reciprocating bar, which is in constant motion whenever the instrument is being played. The roller rubs against the string, making it produce a sound or note, and the reciprocating bar moves the string back and forth over a 3/8" length of the roller at the same time. This seems to strengthen the tone produced and gives a slight tremulant effect, due to the change in motion at each end of the stroke of the bar. As many strings as there are keys depressed may sound at once, thus allowing full chords to be

played. The suction for the pneumatics is provided by a small suction blower in the bottom of the case, driven by a small 110-volt fractional horsepower electric motor. This motor is energized whenever any of the V'Oleon stops on the console are used, by providing for a third contact on the stops to operate an pneumatic off-on switch for the motor.

The V'Oleon is drawn at 8' pitch on the Pedal, 8' and 4' on the Accomp., 16' (tc), 8' and 4' on the Great, and 8' on the Solo manual. It is unified through the relay in exactly the same manner as the pipe stops. The tone in the base end of the register is very cello-like and this quality extends through the middle range, where it gradually changes to a tone not unlike that of the viola. It does not have what might be described as violin tone, and this probably stems from the fact that the strings are coiled. A plywood horn is built over the instrument to direct the tone into the theatre, but the resulting volume is not adequate to make the instrument heard distinctly except with softer combinations. Its usefulness is questionable, to be sure, but it's the dog-gonedest looking contraption in an organ chamber you can possibly imagine — with the possible exception of real angels blowing the trumpets!

