## Description of Fotoplayer Organ at Richland, Washington

Manufacturer: American Photo Player Company.

Model: Style 40 (out of styles 25, 30, 35, 40, 45, and 50) -- Double

Tracker Roll Player.

Build Date: Around 1918. (based on factory worker signatures and dates

found **inside** regulator bellows.)

Original Purchase: Around 1920.

Original Owner: Fred A Watrous, owner/operator of the "STAR" movie theater

(later renamed the GROVE theater) – located in Forest Grove,

Oregon.

Original Operator: Don F Watrous (Fred's teenage son), proving that you don't

need to be musical to play a FOTOPLAYER.

Current Location: 1921 Orchard Way, Richland, WA, 99352

History: This organ played for silent movies from ca. 1920 to ca. 1928

when talking pictures came in. It was then put in storage (behind the movie screen) until 1947 and later stored in the Watrous residence at Forest Grove. In 1980 it was moved to the residence of Bahart Watrous (grandson of Fred) in

the residence of Robert Watrous (grandson of Fred) in

Richland, WA. where it lives today.

Restoration work by Robert began in 1985 and was essentially

completed in 1992.

First the player piano action and roll drive mechanism was rebuilt, following the directions of Larry Givens in his book, "Rebuilding the Player Piano," and with additional details written by Durrell Armstrong of the Player Piano Co., Wichita, Kansas. All supplies (rubberized fabric, rubber tubing, glues) were purchased from the Player Piano Co,

Wichita, Kan.

Rebuilding of the player piano unit was done by Robert Watrous (chemical engineer with specialties in pneumatic control systems, and part-time organist and amateur tracker organ technician at the United Church of Christ in Richland). The piano action was rebuilt by a local piano

technician.

Next, the "Master Chest" (65 pneumatic relay valves which control organ pipes and chimes) was rebuilt following the principles of a player piano rebuild. Metal valve seat parts were badly corroded and had to be redesigned and ordered from a specialty metal fabricator.

Finally, foot valves which admit wind to the pipes and the foot valve actuator bellows had to be recovered. Vacuum bellows which actuate the chime hammers were recovered. Sound effect actuator bellows (drums, castanets, and other percussion) were also rebuilt. (All of these items are contained in the organ's two treble and bass pipe chests.)

**Blower:** 

Wind and vacuum are provided by the original blower unit, refitted with a 3HP, 3500 RPM single phase motor. This original centrifugal blower is mechanically quite crude and a source of vibration and noise. (I fear it may catastrophically disintegrate every time I turn it on.)

**Rolls:** 

The Watrous FotoPlayer organ installation includes a library of about 600 rolls from the 1920's. 250 of these rolls are "PICTUROLLS" made by the FILMUSIC Co, specifically for accompanying silent movies. They have titles like "The Ouarrel and Fight" or "Drunk, Soused Spree." The remaining 350 rolls are mostly QRS word rolls – pop music of the twenties.

Other Documentation:

Amazingly, when the organ was moved out of the Grove Theater in 1947, the original 16 page booklet entitled "Installation, Care and Operation of the FOTOPLAYER" was sitting on the music rack. This booklet contains many pictures, diagrams and dimensions for the six styles of FOTOPLAYER organs.

**Organ Specifications:** 

This style 40 FOTOPLAYER is designed around an upright player piano, different from a standard player piano in three ways: 1) the vacuum is supplied from an electrified. remote blower/vacuum unit instead of by pump pedals, 2) the player unit is a double tracker bar designed to allow a roll to be rewound while another roll is playing, and 3) the piano action includes a (so called) "pellet rail" - 65 "pallet" valves which are lifted by the piano action. (Opening of these pallet valves sends a vacuum signal to the master chest which, in turn, relays the vacuum signal to actuate the pipe foot valves and chime hammers.)

**Pipe Ranks: Wood Flute or Gedackt -- (65 pipes)** 

Open Diapason . . . . . . . (33 treble pipes) Vox Mystica Reed . . . . . . (33 treble pipes)

"Fixed Open Reeds": Three Ranks (65 notes each)

Orchestra Bells: (31 chimes)

**Sound Effects:** Bass Drum (manual pull actuation)

(foot pedal pneumatic)

**Snare Drum (pneumatic actuation) Tom-Tom** (manual pull actuation) **Cow Bell** (pneumatic actuation) **Wood Block (pneumatic actuation)** (pneumatic actuation) Castanets **Tambourine** (pneumatic actuation) **Triangle** (pneumatic actuation) **Tubular Chime (manual actuation)** Gong (manual actuation) **Bird Whistle (manual actuation)** Fire Siren (manual actuation) **Crash Cymbal (manual actuation) Sleigh Bells** (manual actuation)

AhOooGah Horn (manual actuation)
Door Bell (electric battery powered)

(These sound effects are only controlled by the hand of the operator --- not by the player roll.)

**Current Problems:** 

Several pallet valves on the pallet valve rail have begun to leak in the past year, causing pipes to constantly play (cipher). Looks like leather on the pallet valves needs to be replaced.

One of the manual sound effect pull knobs (fire siren) and its leather strap is missing. I plan to order the leather and have a local woodworker turn a replacement knob out of walnut.

The tremulant mechanism has never worked properly, likely due to it's being an inferior cheap design. (In spite of the cheap design, my granddad, Fred, used to tell me that during a sad movie the sure way to bring lots of tears was to turn on the Vox Mystica stop along with the Tremulant.

Pleated fabric which originally was part of the pipe chest front grill has never been replaced – the better for observing the swell shutters and pipes.

Summary prepared by Bob Watrous, 10/4/2015 509-531-2953