

# Basic Detail Report

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## Euphonicon

### Date

1841-1843 ca.

### Primary Maker

John Steward

### Description

Compass: CC-f4 (6 1/2 octaves) Two pedals: left: una corda; right: damper Construction: The piano has a cast-iron frame, which also frames the three sound chambers. The only wood part of the case is the keywell and front and back panels, which are veneered in rosewood. Iron frame with casters. The panels and music rack have ornate fretwork. The piano has three box-like sound chambers in place of a soundboard. The chambers are rectangular, except at the top, where they are shaped like the shoulders of a cello, a viola, and a violin. The

chambers have internal ribbing and soundposts. The chambers are mounted to the lower half of the piano, leaving the upper half of the strings exposed. The grain of the soundboards is vertical. The one-piece bridge is straight, square, and double-pinned throughout. The metal nut is part of the cast-iron frame. Studs on the frame serve as hitchpins. The tuning system is quite interesting and effective and is reminiscent of watch-key tuning. There are no tuning pins and no wrestplank, per se; in their place are screws and a metal screw bar with square holes. Tuning screws located at the bottom of the piano (labeled with tape) which function much like a fine tuner of a violin. The bottom of the screw is squared in order to keep the screw centered. Each string is looped around a metal hook. The hook is pinned to a chain (like a miniature bicycle chain) which passes underneath a rounded tension bar. The chain is pinned to the squared portion of the tuning screw. There is a nut at the top end of the tuning screw. Turning the nut moves the screw up in the screw hole, thereby drawing up the chain and tightening the strings. The sound chambers have gold-painted f-holes, although some euphonicons have actual f-holes carved in the soundboards. The decoration was applied to the back of the instrument, including three ormolu, Adam-style urns adorning the metal frame above the sound chambers. Other ormolu ornaments include the drooping flowers and tassels which lace the corners of the frame. Painted Grecian urns are on both sides of the sound chambers, along with painted pin stripes and arabesques, which can also be seen on the frame. The fretwork music rack is in the shape of a lyre. The music rack and front and back panels are intricately cut with drooping tulips (or bells) and a montage of arabesques and cartouches. Action: Drop action. This action differs from modern drop actions in that the action is at the bottom of the case, save for the middle section, which is above the keyboard. Long wood dowels inserted through the back of the key connect the

key to the whippen assembly, to which the jack flanges and backchecks are attached. The jacks have slots in them, which accommodate the letoff button mounts. The hammers are pinned in flanges which are let into the hammer rail. The hammers are graduated; CC-f3 have two layers of felt; f-sharp3-f4 have only one layer. The hammer moldings are rectangular; the tops are rounded off in the bass and tapered in the treble. The molding of d1 is 32 mm long, 7.5 mm wide, and 10 mm thick. Hammers are felt covered and their size slightly decreases from 1 $\frac{1}{8}$ " at the bottom to  $\frac{3}{8}$ " at the top. The hammers do not have return springs, but do have bridle tapes. Letoff is the only adjustment. The action is mounted to the key frame. Dampers and bridle straps do not look original. At least 40 of the back checks are cracked. Dampers: Damper compass CC-a2 The dampers consist of one thick layer of felt backed with one layer of cloth, which is let in and glued to a wood block. The damper levers are pinned in a flange. The dampers are slightly graduated from bass to treble. A wire sticker connects the damper lever to the whippen assembly. Keyboard: Ivory-covered naturals, with straight-line boxwood moldings. Ebony sharps. Key levers are weighted at the back and guided by front rail pins. Stringing and scaling: Double strung. Other examples in the Metropolitan Museum of Art (see NMM Photograph Archives P607c); Victoria and Albert Museum, London; and the Deutches Museum, Munich. The instrument by F. Beale & Co. (MET) has a nameplate above the keyboard. Rodger Kelly, 1991

### **Dimensions**

Length: 1365 (4'5-3/4" or 53 $\frac{3}{4}$ ") Width: 730 mm ( 2' 4-3/4" or 28") Height left side: 1982 mm ( 6' 6-1/16" or 78 3/16") Height right side: 42 $\frac{1}{2}$ " Keyboard: Three-octave measure: 492 mm Length of heads: 46 mm Width of heads: 22 mm