Basic Detail Report

Cornet, C, B-natural, B-flat, and A-flat

Date

1855 ca.

Primary Maker

Joseph Lathrop Allen

Description

German silver, double loop with two alternative leadpipes for C or B-flat, two alternative tuning slides at second bow, one common valve section and bell, three top-action string-operated flat rotary valves (Allen valve), valve order either 1, ½, 1½ or ½, 1, 1½, internal stop, spiral-spring return, forth valve quick-change (½ or 1 lowering). Equipped with an alternative leadpipe, corresponding tuning slides, and a quick-change valve, this instrument is unusually versatile. The primary nominal pitch is 4½-foot B-flat, as indicated by the fact that the leadpipe for this key is an integral part of the instrument. A second leadpipe for 4-foot C is affixed to the instrument with the help of two wing-screws. The mouthpiece is inserted into one or the other leadpipe, as required. This cornet is also equipped with a quick-change rotary valve with two alternative tuning slides, either lowering the pitch by a semitone (in 4-foot C to B-natural, or in 4½-foot B-flat to A) or by a whole tone (from C to B-flat or B-flat to A-flat). The quick-change valve does not have a touchpiece, but only a simple turn knob. The valve sequence can be changed by placing the semitone slide either at the first or the second valve. Although unsigned, this cornet can be attributed to the school of Joseph Lathrop Allen based on the valve design with flattened tubing as it enters the rotors. It is made entirely of German silver (nickel-brass alloy), a material introduced in the 1830s that became highly popular in American-made valve brass instruments in the following decades. A number of early American makers, such as Thomas Paine and Graves & Co, were using this material by the 1840s and 1850s.

Dimensions

Height: 315 mm (B-flat), 319 mm (C) Tube length: 1277 mm (B-flat), 1166 mm (C) Bore diameter of B-flat leadpipe and tuning slide: 8.9 mm (initial), 8.5 mm (minimum), 11.9 mm (slide) Bore diameter of C leadpipe and tuning slide: 9.1 mm (initial), 8.2 mm (minimum), 10–11.6 mm (slide) Bore diameter valve slides: 11.7 mm Bell diameter: 106 mm