Basic Detail Report

Square piano

Date

1825 ca.

Primary Maker

André Stein

Description

Compass: FF-f4 (six octaves) Pedals: Right: damper; Left: moderator Construction: The case is veneered in mahogany, with fruitwood stringing around the keywell. Sides 16 mm thick, back 19 mm thick. Rounded corners. The back of the instrument is also veneered with a panel, 4 mm thick. There are no moldings along the outside of the case, except for one wooden panel that contains the brass key escutcheon. The piano originally had four screw-on legs, but these were replaced with melodeon-style legs, which have single castors covered with a molded brass claw. (Stein did apparently use melodeon-style legs on some of his pianos. They were also popular on Dutch pianos of the period.) The rectangular tuning pins are pierced and are placed in pairs in the front of the case. There are letters indicating note names. The soundboard grain runs from back left to front right. The one-piece bridge is square with notches. It is cut to its curve and is double pinned. The treble end is butted against the case. The nut has notches immediately behind the nut pins for notes b2-f4, to allow for hammer clearance. There is a damping rail next to the hitchpin plank. It follows the curve of the plank, but is not butted against it. The rail is covered with cloth and is let into both sides of the case. Damping cloth is also interwoven between the strings, but may not be original. The nameboard contains a window with a printed label behind glass. On both sides of this are molded brass cartouches. Metal medallions adorn the sides of the keywell and the sides of the legs. Action: Viennese action. The action is virutally the same as that developed by Johann Andreas Stein, André's father. By the 1820s, metal was being used for the capsels, as this piano demonstrates, and the size of the hammers had increased. The hammers are graduated. The bass hammer molding ends in a bulb shape and has three layers of suede (skin side out) alternating with two layers of sheepskin (flesh side out). The treble hammer moldings are much smaller and end in a slight bulb, with two layers of thick leather and one middle layer of sheepskin. All of the hammers have leather on the side which contacts the backchecks. The bass hammer is 32 mm long, 18 mm wide, and 12 mm thick (including the leather contacting the backcheck). The round hammer shanks are identical, each 3.5 mm thick. The hoppers are leather hinged; they have sheepskin on their faces and have wire springs. The backchecks consist of wires with acute triangular wooden moldings with sheepskin on each side. They are inserted into the top of a rail which is let into the action frame. This rail also has vertical holes in it for the damper wires. Dampers: The dampers encompass the entire range of the piano and are the same throughout. The mahogany damper levers are hinged to a damper rail which is pinned to the top of the case in front of the tuning pins. The levers have brass springs on top with one end let into the side of the damper rail. The dampers consist of a vertical

wooden molding with horizontal piece of hard leather with one layer of cloth glued to the bottom. The sides of the vertical moldings have leather glued to them, and the entire molding is wrapped with two layers of cloth. The dampers are not very efficient and are rather crude looking, especially with regard to the glue job. The damper is lifted from the key via a wire with a hard leather head. There is no means for adjusting damper level height. Keyboard: Bone-covered naturals; ebony sharps. The underside of the natural heads were carved down to about half the thickness of the key lever. Key levers guided by front rail pins. Stringing: FF-BB single strung. C-f4 double strung. FF-AA: Brass core loosely wound with brass BBb-BB: Iron core loosely wound with brass C-A: Brass A#-f4: Iron String gauges: FF-GG: not original GG#-AA: 1.05 mm AA#-BB: 1.00 mm C-D: First string: 1.00 mm; Second string: 1.00 mm D#-E: First string: .95 mm; Second string: .95 mm F: First string: .95 mm; Second string: .90 mm F#-A: First string: .90 mm; Second string: .90 mm A#-B: First string: .85 mm; Second string: .85 mm c: First string: .85 mm; Second string: .80 mm c#-d: First string: .80 mm; Second string: .80 mm e: First string: .85 mm; Second string: .85 mm f-d1: First string: .80 mm; Second string: .80 mm d#1-f#1: First string: .75 mm; Second string: .75 mm g1-g#1: First string: .70 mm; Second string: .70 mm a1: First string: .75 mm; Second string: .75 mm a#1-c#1: First string: .70 mm; Second string: .70 mm d#2: First string: .65 mm; Second string: .65 mm e2: First string: .70 mm; Second string: .70 mm f2-b2: First string: .65 mm; Second string: .65 mm c3-d#3: First string: .60 mm; Second string: .60 mm e3: First string: .60 mm; Second string: .55 mm f3-f4: First string: .55 mm; Second string: .55 mm Cataloging by Rodger Kelly, 1991

Dimensions

Length: 1675 mm (5’6”) Width: 731 mm (4' 4-3/4") Overall height: 817 mm (2' 8-1/2") Height of case: 296 mm (11-5/8") Keyboard: Three-octave measure: 475 mm Length of heads: 39 mm Width of heads: 21 mm Scaling: FF: Length: 1419 mm; Strike point: 144 mm C: Length: 1291 mm; Strike point: 143 mm c: Length: 964 mm; Strike point: 100 mm c1: Length: 512 mm; Strike point: 62 mm c2: Length: 279 mm; Strike point: 38 mm c3: Length: 139 mm; Strike point: 12 mm c4: Length: 67 mm; Strike point: 6 mm f4: Length: 51 mm; Strike point: 5 mm (e4)