Quelle: http://www.precisionpianoservices.com/pianosrestored.shtml

The Steen Nielsen Hammerspinet Hybrid Piano



Here is a superb example of unique and complicated engineering. This Steen Nielsen Hammerspinet at first glance appears to be a harpsichord, but it is far from it. This instrument has many features we have never seen in a piano before. Each key has only one string per note from bass to treble, as well as having all the tuning pins on the rear side of the cabinet, where normally, you would have the hitch pins for the strings. Also, the action and damper lever assembly is entirely under the keys of the piano.





These pictures illustrate the action's basic function. A normal type jack is connected to the bottom of each key. The key end is connected to a bar as a pivot point and holds the key in position (there are no balance rail pins). As the key is depressed, a let-off button makes contact with a wooden rail, which then trips a pivoting hammershank towards the string. At the same time, another let-off type button depresses the back of a damper lever in the horizontal position, lifting it off the string to allow the note to sound. The weight of the action is adjusted by a screw under the rear of the key that is in contact with a spiral spring (no key leads are used). The height of each key at rest is controlled by a screw on the top of the key just behind the keytops, that comes in contact with a weighted wooden piece that is part of the piano's cabinetry. Keydip is controlled with a normal front rail adjustment.

This piano came to our studio on the request to "make it play" and "make the pedals work." The instrument was completely out of regulation (more than likely by someone who attempted repairs, but had no concept of how the instrument functioned). Also, pedal function was inoperative. After a basic study of the mechanics of the action, a regulation was performed. Pedal functions were restored in part by replacing the pivot points (left) with steel as opposed to the plastic parts which would bend under the tension of the pedals.

The tone of this piano is unique and similar to upright toy pianos we have worked on in the past. The playability, astoundingly, is quite good! There is good pianissimo to fortissimo control, and note repetition is consistent and quick... As far as we know, this piano is a Danish design.