

An Octave Harpsichord at the Instrumental Museum - Lisbon

by L. A. Esteves Pereira

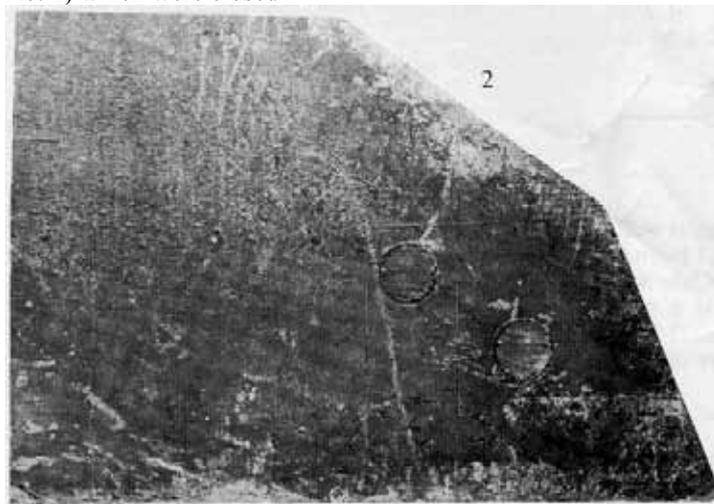
Among the many keyboard instruments preserved in the Museum, organs, clavichords, harpsichords, spinets, virginals, fortepianos, almost every kind that has been built along the centuries, there are several harpsichords by different makers.

In the list of these last instruments, two deserve our special attention, on account of their unusual characteristics: one is a quarter harpsichord by 'Gaetanus Giannini faciebat anno 1628' which will be described in a later paper: the other is the octave harpsichord to which the present article is devoted.

This small instrument (photo No. 1) bears no maker's name but only the date 1724 painted on the front face of the jack-rail. The same date is handwritten on the upper face of the arm of the first key.

The general shape is, of course, distorted by the short length and may be misleading when we want to assess the origin of the instrument from its general appearance. But the robustness of the case and the internal construction may lead us to think that we are in presence of a Flemish instrument. The author of the present article will be very grateful to any readers who can help him to fix a definitive origin and/or a possible maker's name.

The case, cover and the soundboard are all made of pine. The bottom is 15 mm thick and the same thickness is used at the spine and cheek. Only the bentside is slightly thinner, starting 15 mm at the tail end and becoming 11 mm at the cheek end. The bottom, near the tail has two holes, each about 30 mm diameter (photo No. 2) which were closed



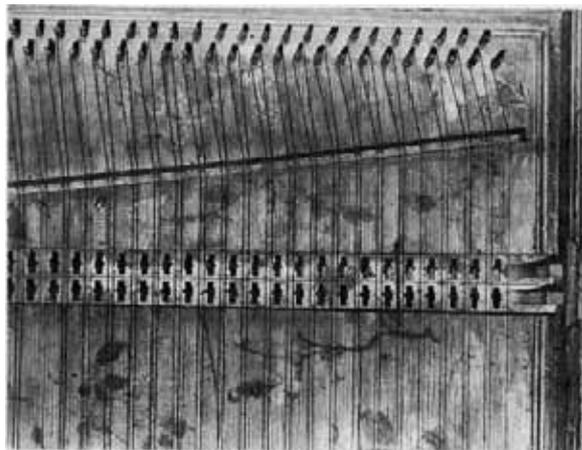
with wood discs. These holes, when opened, enabled us to observe the internal construction with the aid of a 90° angle photographic viewer and a suspended small electric lamp.

The bottom, cheek, spine and tail are painted dark green with several coats of paint. The inside of the lid and the name-board are decorated with wavy lines of yellow. The outside of the lid is also dark green. The hinges are of iron. The board that covers the front of the keys is missing. In the

name-board there is an opening, probably to house a small drawer for the tools, but the drawer is missing. The stand is a modern addition ordered by the Museum.

The overall dimensions of this instrument are: length 107,5 cm; width 71 cm; height 18 cm (photo No. 3). Inside the case, the construction is very simple. From the middle of the bellyrail, goes a piece of wood about 40 mm wide, up to the middle of the bentside. Another reinforcing bar, about 30 mm wide, goes from the bass end of the bellyrail up to the junction of the tail piece with the bentside. Both bars are glued to the bottom. There are no more structural parts inside, apart from the liners to which the soundboard is fixed. The soundboard, as mentioned above, is made of pine of 2/3 mm thickness, and shows several cracks. The grain is parallel to the spine. The ribbing is quite peculiar: there is a cut-off bar which goes across the whole diagonal of the soundboard. The smallest distance to the bridge is 80 mm. There are three more ribs, parallel to the bellyrail and between the cut-off bar and the spine. Apart from this usual ribbing, there are four other ribs which go from the cut-off bar to the bentside and which seem to be later additions. These last four ribs cross the bridge, more or less half-way along.

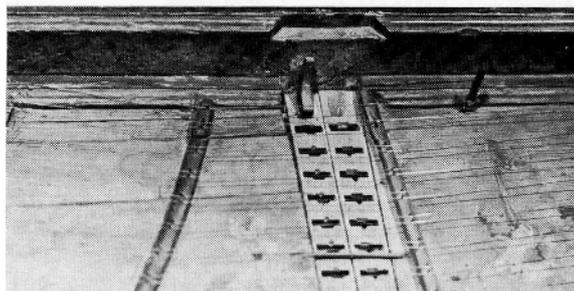
The wrestplank is 14 cm wide with two rows of wrest pins of the usual old model. At the bass side, there are no alterations visible as far as the wrestpins are concerned, but it is obvious that the nut was moved approx. its own width, to increase the plucking distance (?) (photo No. 4). In the same



4

photo, we can see that the two registers have square pieces of wood which are glued to the register and free from the case side.

At the treble end, the nut, which is 8 mm wide, was lengthened about 4 cm to accommodate three extra strings, two of them corresponding to the two last wrestpins of the rows and the third connected to one wrestpin driven half-way between the rows and the nut (photo No. 5). Also, we can see that the



registers, at the treble end, had the squares (one is missing) cut to enable the opening of one extra slot in each, for the *c sharp* and *d*. These alterations lead us to think that the compass of the original keyboard was C/E to c5, four octaves and that was roughly extended to d5, cutting part of the right-hand end block, which was reduced to a mere 5 mm, instead of the 30 mm at the bass end. Also, the lines inscribed on the two treble naturals and the length of c sharp 5 are not the same of the remaining keys (photo No. 6).



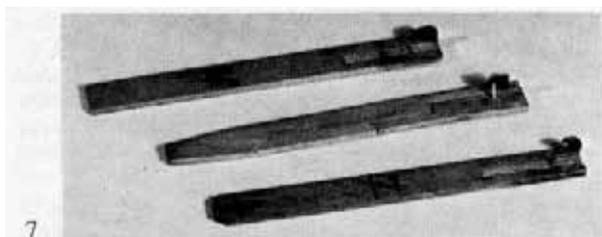
The registers, which are 16 mm wide, show the usual arrangement for 2 x 4 ' specification. One register with the quills pointing to the left and the other to the right. The registers are not movable, therefore, the two sets of strings are to be plucked simultaneously. The kind of wood used in the keys remains to be found out. The covering of the naturals is bone, not ivory. The compass of the octave is 157/158 mm. The dimensions of the keys are: naturals 22 x 140 mm; accidentals 10 x 58 (60) mm.

The strings, all of steel, are certainly not original. The first bass string C/E is 0,5 mm ϕ , followed by 0,4 mm ϕ up to c3 and 0,2 mm ϕ to the top. All the strings were at some time varnished. The scale, at c3, is 34,3 cm or aprox. 13 1/2", which follows closely the flemish figures. The lengths of the strings are as follows:

C/E-75,2 cm (28 1/2")
 c2 - 60,5 cm (23 3/4")
 c3 - 34,3 cm (13 1/2")
 c4 - 17,5 cm (67/8")
 c5 - 8,2 cm (3 1/4")

The strings are fixed by the usual hitchpins, passing over the bridge which has the same cross-section and dimensions of the nut. The distance between the bridge and the bentside is aprox. 10 cm (4"). The bridge has double pins for the first 22 pairs of strings and single pins for the remainder.

The instrument has two or three different generations of jacks. Some seem to be contemporary with the instrument, but others are, apparently, later replacements. In the photo No. 7, we can see,

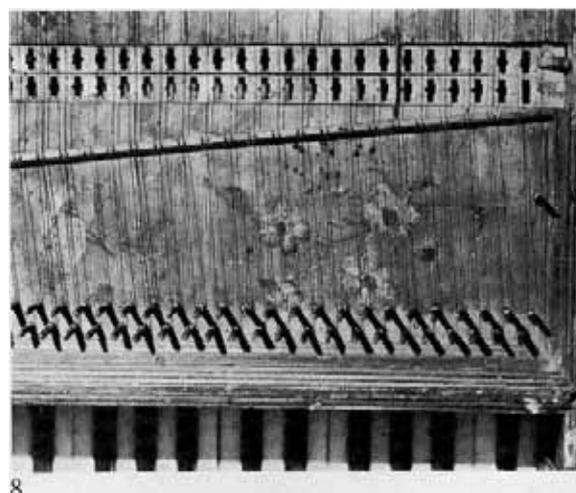


in the foreground, the oldest type of jacks which have had the axle of the tongues positioned in, at least, three different positions. In the middle, we can see a restored jack with delrin plectrum and in the

background, one which we believe to be latter addition or replacement. The wood used in most of the jacks is beech but some of them seem to be of pear. The jacks were numbered with different ages of caligraphy. The quilling was raven but only a very few bits of broken quills remain. All the jacks, but two, have one damper; the two others have two dampers.

The restoration of this instrument has been started with the jacks, of which some 10% were missing.

1. This instrument was part of the collection of the late Mr Alfredo Keil (1850-1907), musician, composer (including the music for the national anthem 'A Portuguesa') and collector of musical instruments. His collection was donated to the Museum.
2. The treble end of the bridge was lengthened as nut (photo No. 8).



© The English Harpsichord Magazine
 Vol. 2 No2 1978

Reproduced with permission.
 The British Harpsichord Society
www.harpsichord.org.uk