



Music in Code

The Pin Barrel

RICHARD (V O):

To find out what a pin barrel is and how it creates music, I've come to the Nickelodeon collection at Ashorne Hall near Warwick, to talk to Paul Camps who's been restoring mechanical musical instruments for more than twenty-five years.

RICHARD:

Paul how does this pin barrel work?

PAUL CAMPS:

Well, on this particular type of instrument you have to remember that you didn't get to hear the tune in its entirety. Erm, somebody would have to have arranged the piece of music to fit into the short space that was available on the barrel. Erm, once that was done it could quite literally be marked on to a sheet of paper and that could be wrapped around the barrel

PAUL (OOV):

And all the pins would have been driven into the correct positions. The information that is actually pinned onto the barrel...

PAUL (IV):

...is read by something called a key-frame

(OOV): These small lever fingers actually read the pins as they pass underneath and as the pins deflect (IV) the levers you get an effect occurring high up here on the instrument. I mean with this example here (OOV), pulls back one or two of the hammers.

RICHARD:

(OOV) Some of the (IV) pins are different sizes why's that?

PAUL:

Well, (OOV) as you can see on this particular barrel we have a series of short pins, little prickly things that we have here and we have longer pins, which are normally referred to as bridges. The purpose of the bridge of course is to sustain or (IV) perform something for a longer durational period. In fact we've got rather a large number of them here on this section of the barrel (OOV) and I can just show you by lifting this little lever that in fact its actually clearing the damper from the strings.

RICHARD (IV):

I can see we've got a piano here, what other instruments do we have?

PAUL (IV):

Well this particular barrel is controlling, as you quite right noticed, (OOV) a piano, erm, (IV) we have other percussion instruments, we have a (OOV) xylophone err, there's small cymbal, a snare drum (IV) and there's even something called (OOV)a, a tremolo section at this end at this end where the, where the hammers are actually (IV) reiterated and repeated.

RICHARD:

(OOV) Paul it (IV) can get a bit boring listening to the same tune every time, is it possible to change the tune on this barrel?

PAUL (IV):

Yes actually there was six different tunes on the barrel and there was an additional handle at the end of the cabinet, which the customer would have to turn crank to shunt the barrel up and down laterally so aligning the correct sequence of pins with the key-frame.

RICHARD (IV):

Would it be possible to hear another tune?

PAUL (IV):

Err, well actually in all the years this instrument's been here I've only ever listened to the one tune that we've heard so far but erm, I'm willing to give it a whirl and see what happens.

RICHARD:

Yes, please.

CAPTION:

Clockwork Barrel
Orchestra
Gerard G.I.
Belgium c.1900