

Nicely Done Gaming

Gaming Math & Casino Game Design



Pattern Recognition – Fantastic Novel Co-Starring a Calculator



William Gibson's remarkable book, *Pattern Recognition*, is one of those rare novels that I started rereading as soon as finishing it the first time. It is the only book that I bought in Kindle form despite owning a hardcopy so as to mark sections (during my 3rd reading!) that I could easily grep in the future.

I love this book for many of the same reasons that I love casino game design – it's engaging on so many levels and definitely both sides of the brain.

One of the more endearing sub-stories centers on Curta calculator. Not only is this hand-held calculator a technologic marvel, the story of its development during WWII by Curt Herzstark whilst imprisoned in Buchenwald concentration camp is both moving and otherworldly.

The full story can be found, like most things, on Wikipedia (<http://en.wikipedia.org/wiki/Curta>), though *Pattern Recognition* might provide a more compelling introduction.

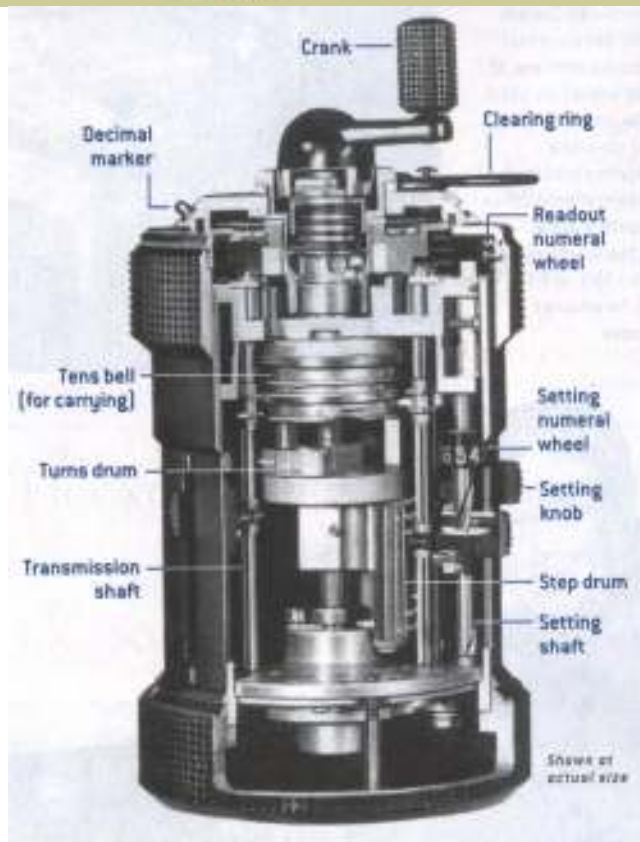


One of the aspects of the Curta calculator that truly puzzled me was its ability to calculate square roots to 6 or 8 digits (based on Curta model). Having designed and built floating point hardware to very quickly calculate reciprocal square roots (needed for anti-submarine sonar beamforming) I was astounded that a device no larger than a pepper grinder could do proper square roots without a single circuit.

Here is a description of the algorithm:

<http://www.afjarvis.staff.shef.ac.uk/math/jarvisspec02.pdf>

As with *Pattern Recognition*, the story of the Curta calculator can delight on so many levels.



source: E. Anthes, Historische Bürowelt