## Pehr (Per) Georg Scheutz

Born: Sept. 23, 1785;

Stockholm, Sweden
Died: May 22, 1873

In 1834, after reading about the Difference Engine [June 14] in a lengthy article written by Dionysius Lardner [April 3], Scheutz and his son Edvard began working on a simplified version, called the Scheutzian calculation engine. By 1843, it supported 15-digit numbers and could calculate using four-orders of difference (Babbage's design used seven-orders).
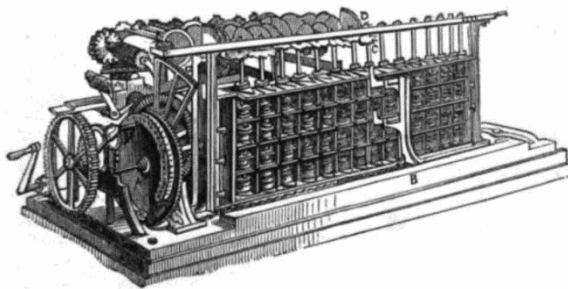
The Scheutzian calculation engine (1867).

The Swedish Academy provided Scheutz with funding to build an improved model in 1851, which was completed in just two years. It became the first calculator that could print its results, and was about the size of a piano.

The engine went on display at the Royal Society in 1854, and Charles Babbage [Dec 26] welcomed the Scheutzes, and promoted their interests. When their engine won a gold medal at the Paris Exhibition in 1855, Babbage was present at the ceremony.

The machine was bought by the Dudley Observatory in NYC in 1857 to calculate tables. A second was purchased by the British Registrar General in 1859 to produce tables for the life insurance industry. However, both machines proved unreliable, and weren't much used.

Scheutz forecast in 1833 that just one such machine "would suffice for the needs of the whole world," probably the first example of a prominent scientist wildly underestimating the potential of computing.

For a centennial difference engine, see [Dec 21].

Nintendo

Sept. 23, 1889

Fusajiro Yamauchi founded Nintendo Koppai in Kyoto to manufacture hanafuda, Japanese playing cards. Loosely translated, Nintendo means "leave luck to heaven".

In 1949, the founder's 22-year-old great-grandson, Hiroshi Yamauchi, took over the company, and led it until 2002. He tried expanding its card playing audience by securing the rights to make Disney cards and "nude cards" including ones depicting *Playboy*'s Marilyn Monroe centerfold. The company also branched out into making noodle soup, ball point pens, baby swings, and running a taxi company called "Daiya"(Diamond). At one point they operated a love hotel, a venture that flopped.

Nintendo moved into the toy and game industry in the 1960's as playing card sales declined. After some success, thanks to the engineer and product developer Gunpei Yokoi [Sept 10], the company started developing video games in 1974. Yokoi recalled that one of his first jobs at Nintendo was to check the machines that produced hanafuda cards.

In 1977 Nintendo hired Shigeru Miyamoto [Nov 16], who would create many of its most successful games, including Donkey Kong [July 9], Super Mario Bros [Sept 13], The Legend of Zelda [Feb 21], and games for the Wii [Nov 19].

The company's early console systems included 1985's Nintendo Entertainment System (NES [Oct 18]), released in Japan as the Famicom.

Despite all this, Nintendo is still the no. 1 playing-card manufacturer in Japan.

Naked IBM

Sept. 23, 1968

A man stood naked outside the IBM building on fashionable Peachtree Street in Atlanta, Georgia, carrying a sign that said "Computers are Obscene". Police later told reporters that he would be charged with public indecency.

Ceefax Lives

Sept. 23, 1974

Ceefax was the first teletext system in the world, a UK TV-based information retrieval service. Content included national, international, and sporting news, weather, and television schedules. The system went live today with 30 bountiful pages of text, although it had been first announced by the BBC back in Oct. 1972. The company had filed a patent for the service as Teledata back on Feb. 9, 1971.

The system employed spare lines in the vertical blanking interval of the TV signal to transmit data to a set-top decoder. The resulting display format was limited to just 24 rows by 40 columns of characters, but the same approach was adopted by British Post Office's Prestel system [June 8].

The switch-off of the analogue TV signal in the UK saw the closure of Ceefax in Oct. 2012. However, its replacement, the BBC Red Button, is available on most digital services, but the BBC has recently threatened to close it down.

From 1983 to 1989, Ceefax broadcast computer programs,

known as telesoftware [Sept 25], primarily for the BBC Micro [Dec 1].

The Alles Machine
Fall 1976

Hal Alles from Bell Labs published an article about his Alles Machine (aka Alice) in the *Computer Music Journal*, Vol. 1 No. 3. It was one of the first 'real-time' digital synthesizer – as opposed to digital/analogue hybrids such as GROOVE [Nov 13], and was built around a LSI-11 (the CPU in the PDP-11 [Jan 5]) and programmable sound generators. The system weighed 300 pounds, and was optimistically referred to it as being portable.

Several commercial synthesizers based on the design were released in the 1980s, including the Atari AMY sound chip (which almost appeared in the Atari 520ST [Jan 10]).

In 1977, the device was one of the centerpieces of the Academy of Motion Picture's 50th anniversary celebration of talking pictures.

MCI Mail
Sept. 23, 1983

MCI Mail was launched at a press conference by MCI's chairman, William G. McGowan.

The service initially only allowed users to send messages to other MCI Mail users, but was later able to connect to services such as CompuServe [Sept 24]. In particular, in July 1989, it became the first commercial service to offer a gateway to NSFNet [July 16], the National Science Foundation's proto-Internet.

MCI Mail could even handle messages sent to real-world postal addresses. Each one was laser-printed at an MCI Mail printshop, placed in an envelope and mailed via the US Postal Service. Admitedly, the service was expensive, costing $1 to $2 per page, but still attractive because there were few affordable letter-quality laser-printers at the time.

Development of the system began at DEC, on VAX 11/780's [Oct 25], and later moved to Hewlett-Packard on HP-3000s. Vinton Cerf [June 23] was one of the architects.

The service was decommissioned in June 2003, and Cerf commented, "It lasted for a lot longer than I expected. I was surprised about the level of loyalty that people had."

In 1997, MCI was acquired by WorldCom for $30 billion. Five years later, WorldCom declared bankruptcy, but emerged in 2004 as MCI. In 2005, MCI was acquired by Verizon [July 28].

Mars Orbiter Problem
Sept. 23, 1999

The $125 million Mars Climate Orbiter and its Mars Polar Lander were part of a programme to study the Martian weather. After a 286-day journey from Earth, the Orbiter fired its engines to go into orbit on this day. Unfortunately, the trajectory was too close to the planet, causing the spacecraft to enter the upper atmosphere and disintegrate.

Artist's rendition of the Mars Climate Orbiter. NASA/JPL/Corby Waste.

The problem was later traced to software which produced results in the US units of pound-seconds instead of the SI units of newton-seconds as the NASA contract had specified.

To compound matters, the ground controllers had ignored several indications that something was wrong with the craft's trajectory during its trip to Mars.

For more numerical errors, see [Feb 10], [Feb 25], [June 4], [Aug 1], [Oct 24].

Mozilla Phoenix
Sept. 23, 2002

Mozilla released Phoenix 0.1, the first version of what would become the Firefox browser [Nov 9]. It utilized XUL, Mozilla's cross-platform, XML-based user interface language and Gecko, Mozilla's rendering engine.

Phoenix was a response to what its developers, Dave Hyatt, Joe Hewitt, and Blake Ross, perceived as feature creep in Netscape [March 25], The name was meant to suggest a triumphant rise from the ashes; in this case the ashes were Netscape after it had destroyed by Internet Explorer [Aug 16].

The browser was soon renamed because of trademark issues with Phoenix Technologies (a BIOS company). First it was changed to Firebird (a name which also turned out to be taken), and then to Firefox.

First Android Phone
Sept. 23, 2008

Google, HTC [May 15], and T-Mobile unveiled the T-Mobile G1 in the US, the first cellphone to use the Android OS [Aug 17]; the device was known as the "HTC Dream" in other parts of the world.

Sadly, the phone's pop-up 3.2-inch touchscreen and physical keyboard weren't well received, and the device also lacked a standard headphone jack.

Nevertheless, Android showed how Google was planning to integrate its products and services, including Google Maps

[Feb 8], YouTube [Feb 14], and a Web browser (pre-Chrome [Sept 2]) with Google search. It also supported Android Market [Oct 22], the app store that Google proudly stated would soon have dozens of applications for sale.