August 2nd

Elisha Gray

Born: Aug. 2, 1835;

Barnesville, Ohio
Died: January 21, 1901

Gray is considered by some historians to be the true inventor of the telephone, despite losing out to Alexander Graham Bell for its patent [Feb 14].

Elisha Gray. Portrait from Popular Science Monthly, Volume 14 (1878).

Gray gave the first public demonstration of his invention at his local church on Dec. 29, 1874, transmitting "familiar melodies through telegraph wire" according to a newspaper report. The "Musical Telegraph" used electromagnets to oscillate steel reeds, an approach that has caused Gray to be also called the father of the music synthesizer [May 23].

On April 2, 1877, he staged a 'Telephone concert' at Steinway Hall on East 14th Street in NYC. The pianist, Frederick Boscovitz, 'played' a 16-note version of the Musical Telegraph located in the Western Union office in Philadelphia, and the audio was transmitted via the telegraph into the hall for the edification of an astonished New York audience.

In 1887, Gray developed the Telautograph, which transmitted hand-writing as electrical impulses, and a pen attached to the receiving device converted the signals back into writing. The Telautograph became quite popular in banks for sending signatures.

Percy Edwin Ludgate

Born: Aug. 2, 1883;

Skibbereen, Republic of Ireland
Died: October 16, 1922

Ludgate designed his first "analytical machine" knowing nothing of Charles Babbage's earlier work [Dec 23]. For example, it used multiplication as its base mechanism unlike Babbage's Analytical Engine which was based on repeated addition. This approach would later be termed "Irish logarithms" due to Ludgate's involvement. Also, while Babbage used columns of toothed discs to store numbers Ludgate opted for a simpler shuttle mechanism.

However, after Ludgate became familiar with Babbage's efforts, he freely admitted that he was "greatly assisted in the more advanced stages of the problem by, and [received] valuable suggestions from, the writings of that accomplished scholar." Another thing he shared with Babbage was that his machine never left the design stage.

Ludgate's machine would have been capable of storing 192 numbers, each consisting of 20 decimal digits, and could perform all of the basic arithmetic operations. It was to work automatically under the control of a perforated tape, or be controlled manually from a keyboard. It would be powered by an electrical motor, and the complete device would be "portable", occupying only a mere 8 cubic feet of space.

In April 1909 he presented the details to the Royal Dublin Society, and in 1914 he lectured about the machine in Edinburgh at a special conference on mathematics and computing. Sadly, his machine schematics were later lost, so the only record of his ideas are his 1909 paper, and a very brief account published in 1914.

Brian Randell wrote "One must wonder just how much more he might have achieved, if he had had but a modest fraction of the resources available to Babbage, and had not succumbed to pneumonia at such a tragically early age."

Mina Spiegel Rees

Born: Aug. 2, 1902;

Cleveland, Ohio
Died: October 25, 1997

Rees was the first female President of the American Association for the Advancement of Science.

Earlier in her career, from 1945-1951, she had been the head of the mathematics department of the US Office of Naval Research (ONR). During that time, she was instrumental in developing projects on mathematical and computing algorithms, helped to sponsor the Moore School Lectures [July 8], and funded programmes to build computers, including the IAS [June 10] at Princeton and Project Whirlwind [April 20].

Rees was an early proponent of core memory [Oct 21], transistors, and visual displays, and wrote an influential article for *Science* in Dec. 1950: "The federal computing machine program" , which stressed the growing importance of computers. She even managed to reference the Steve Canyon cartoon strip by by Milton Caniff in the piece – the "Mechanical Brain" which had first run in April. It featured a "Comrade Smrnsk" , Russia's greatest mathematician and computer expert.

John Maurice McClean Pinkerton

Born: Aug. 2, 1919;

Bath, UK
Died: December 22, 1997

Pinkerton, helped by David Caminer, designed the UK's first business computer, the LEO, for J. Lyons and Co. It ran its first program on [Sept 5] 1951.

Pinkerton copied Maurice Wilkes' EDSAC design [May 6], but improved its reliability by identifying common points of failure (notably the valves) and developed test procedures to detect pending problems.

Lyons saw the potential in building computers for other companies, and set up a subsidiary, LEO Computers Ltd, in 1955 with Pinkerton as technical director. He was responsible for the development of the LEO II and LEO III. About 80 LEO III's were sold: a considerable number for the time.

Unfortunately by 1961 it had become clear that Lyons didn't have the resources to maintain their computer business, and the operation was sold to English Electric, with Pinkerton appointed head of research at the company. English Electric went through a series of mergers, eventually becoming part of ICL on [July 9] 1968.

In retirement Pinkerton became one of the first members of the Worshipful Company of Information Technologists [Jan 7]

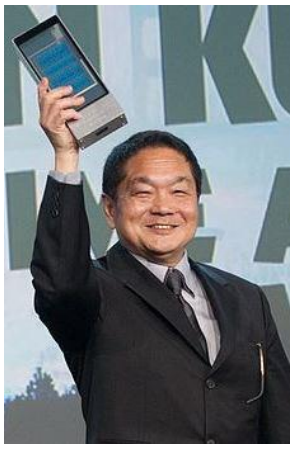
Ken Kutaragi

Born: Aug. 2, 1950;

Tokyo, Japan

Kutaragi is often called the father of the PlayStation [Dec 3], including the PlayStation 2 [March 4], PlayStation Portable, and the PlayStation 3 [Nov 11].

In the late 1980's Kutaragi managed to persuade Sony to fund his work on building a Nintendo Super NES [Nov 21] CD-ROM Adapter even though Sony was generally uninterested in the gaming market. His efforts resulted in a device called the "Play Station", a console that could run both Super NES games and software released in the new SuperDisc format.



Ken Kutaragi at the Game Developers Choice Awards 2014.

Eventually, the partnership between Sony and Nintendo soured due to licensing issues, but Sony continued to develop their own console, which became the PlayStation that we know today. Kutaragi was directly responsible for its graphics rendering chip, and was later appointed head of the division in charge of the PlayStation at Sony Computer Entertainment.

Capacitive TouchScreen

Aug. 2, 1966

Eric A. Johnson, of the Royal Radar Establishment in Malvern, UK, published his work on capacitive touchscreens in a short article in *Electronics Letters* in October 1965. He filed a patent for his invention on this day, which was later granted as US 3482241.

Although capacitive touchscreens were very popular for a while, they were eventually eclipsed by resistive touchscreens [Oct 7], which respond to pressure rather than electrical conductivity. In particular, this means they can work with both a stylus or a finger

Why Big Blue?

Aug. 2, 1972

There are no definite answers as to why IBM is nicknamed "Big Blue". Some say its an allusion to the blue panels that IBM put on its mainframes in the 1960s, or a reference to the dark blue suits once worn religiously by IBM's salesmen.

Most commentators think it stems from the makeover to IBM's logo by Paul Rand [Aug 15] in 1972. The revised version depicts the three IBM letters as eight bold horizontal stripes, that are often colored blue.

It's also unclear when the logo was officially adopted, but several photos of System/370 [June 30] models sport the 8-bar logo, and Model 158 was announced on this day.

Another likely first date for the phrase would be when it was first used in a publication. That occurred in a letter sent to *ComputerWorld* by Richard J August, which appeared in the Aug. 27, 1975 issue on p.12. This predates a more commonly known "first publication of 'Big Blue' in an article" in the June 8, 1981 issue of *BusinessWeek*.

Weird Science Released

Aug. 2, 1985

Weird Science was a 1985 teen sci-fi comedy written and directed by John Hughes, and starring Anthony Michael Hall, Ilan Mitchell-Smith, and Kelly Le Brock. It was very loosely based on Al Feldstein's story "Made of the Future" that first appeared in the fifth issue of the EC comic "Weird Science" in October 1950.

Two high schoolers attempt to create a virtual girl using their home computer. After hooking

electrodes to a doll and hacking into a Pentagon computer system, a power surge creates Lisa (Kelly Le Brock), a woman with seemingly endless superpowers.

The machine used as the boys' computer was a Memotech MTX 512, which was technically similar to the MSX computers of the time [June 16], although neither was capable of "virtual girl creation".

That lack of functionality wasn't why Memotech, a UK company, went into receivership in 1985. It was mostly due to the substantial investment Memotech had made in producing enough MTXs for 64,000 schools in the USSR, a deal which fell through.

As a result of Memotech's bankruptcy, the UK government also withdraw its financial support from all the other UK computer manufacturers, including Sinclair [July 30] and Acorn [Dec 5].

CIX

Aug. 2, 1991

The Commercial Internet eXchange (CIX, pronounced "kicks" not "sicks" [July 8]), an Internet connection point for commercial traffic, was incorporated on this day.

CIX marked the beginning of the Internet's transition into a commercial enterprise, away from purely research, education, government, and military roles (e.g. as typified by the ARPANET [Oct 29], MILNET [April 4], and NSFNET [July 16]).

The first partners in CIX were UUNET [May 12], PSINet, and CERFnet, and CIX initially consisted of just a single router that connected those three networks. The other big commercial network of that time was ANSNET [Nov 00], and for a while wouldn't talk to each other, but eventually made up.

CIX pioneered a business model that was soon followed by other Internet Service Providers, such as Sprint and MCI [Sept 23], and CIX gradually took on the role of a trade association.

Mighty Mouse Controversy

Aug. 2, 2005

The Apple "Mighty Mouse" was the first since the one attached to the Apple Lisa [Jan 19] 22 years previously that had multi-button functionality. It broke with Apple tradition by having two buttons, and a miniature trackball for scrolling. However, the really serious controversy was over its name.

Apple had thought it had every base covered by obtaining a license from Viacom and CBS, owners of the "Mighty Mouse" cartoon series. However, another company – "Man and Machine" – had a trademark for the name from 2004.To make matters worse, another scrolling mouse device called the "Mighty Mouse" had been developed by NTT Japan and ETH Zürich in 1985. Indeed, it had a strong claim to being the first scrolling mouse, although the wheel was on the side of the device. The first top-mounted scrolling wheel was developed in 1987 by Jack McCauley for gaming applications.

Apple's next mouse, a wireless device, was released on Oct. 20, 2009, and was called the "Magic Mouse".

The "Mighty Mouse" cartoon character was originally called "Super Mouse" (as a parody of Superman), and made his debut in the Oct. 1942 short *The Mouse of Tomorrow*. The name was changed in his eighth film after it was discovered that there was a comic book character with that name, who had also debuted in Oct. 1942 in *Coo Coo Comics*.