

HERMAN HOLLERITH (1860-1929)

Biography: His parents were immigrants to the United States from Germany in 1848. An engineering graduate of the Columbia School of Mines in 1879 as a mining engineer, with low marks only in bookkeeping and machines. He liked good cigars, fine wine, Guernsey cows, and money. He founded his own business and merged with others. Stayed with the CTR company until 1921, but participated in its activities less and less.... He avoided general manager Watson as much as possible, and devoted most of

his time to the life of a gentleman farmer on Chesapeake Bay. He seemed to be more interested in boating, farming, and raising Guernsey cattle than in running a business. Retired in 1921 Died of a heart attack in 1929.

Professional life:

After a study he was employed as statistician at the US Census Bureau. In 1882 he joined the Massachusetts Institute of Technology where he taught mechanical engineering and began his experiments with a punched paper tape. In 1884 he obtained a post in the U.S. Patent Office in Washington and experience in this work probably helped him to receive more than 30 US patents. He invented among others an electrically actuated brake system (considered him as his highest achievement) for trains but it lost out to the Westinghouse steam-actuated brake.

He patented a method to convert the information on punched cards into electrical impulses and punches devices named the Hollerith Electric Tabulating System, passed for manufacture to „Pratt and Whitney” and „Western Electric Company”. Hollerith's system was first tested on tabulating mortality statistics in Baltimore, New Jersey in 1887 and was in use in the 1890 US census. The system was again used for the 1891 census in Canada, Norway and Austria and later for the 1911 UK census. He wrote up the details of his tabulating systems and submitted the work for a doctorate at the Columbia School of Mines and was awarded his doctorate in 1890.

In 1896 Hollerith founded the Tabulating Machine Company to manufacture his products. The cost of using Hollerith's system was so high that in 1900 the Census Bureau decided to develop their own system and the engineer James Powers was in charge of the development of it.

In 1911, after the census, he left the Census Bureau and formed the Powers Tabulating Machine Company which was much more than Hollerith's Tabulating Machine Company. So to be on market Hollerith decided to merge with another company that become the Computer Tabulating Recording Company. The CTR Company was the result of the merger, of three companies: the International Time Recording Company, The Tabulating Machine Company, and the Computing Scale Company.. Hollerith served as a consulting engineer with the Computer Tabulating Recording Company. The CTR had recovered its leading role by 1920, due not to Hollerith but to Thomas J Watson who joined the company in 1918. The company was renamed International Business Machines Corporation (IBM), in 1924.

In brief:

Hollerith was the first one to use a system that could process thousands of transactions (each one recorded in a punched card) in a single run. The concept of automated data processing had been born. Punched card technology had lasted over hundred years until computers era has come.

Based on:

- <http://www.gap-system.org/%7Ehistory/Printonly/Hollerith.html>.
- IBM Archive: "Herman Hollerith: Data Processing Pioneer," an article by William R. Aul, published on pp. 22-24 of the November 1972 edition of *Think*, IBM's employee publication.
- author's personal knowledge

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