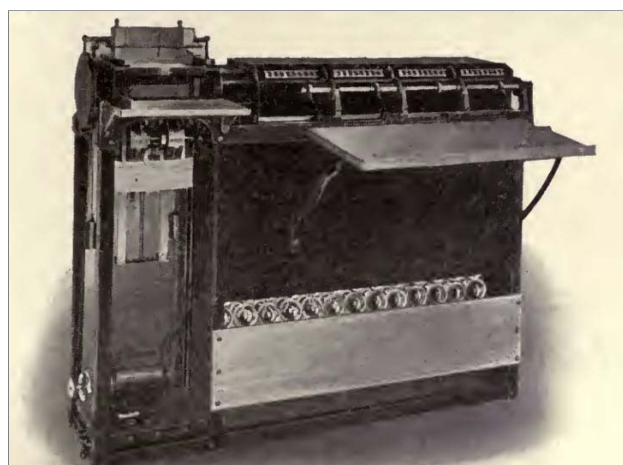*Columbia University Computing History*
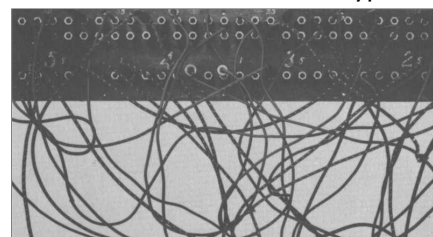
Hollerith Type 1 Tabulator 1906

Courtesy of the Tabulating Machine Company

Fig. 230. Hollerith Tabulating Machine for Totaling the Data Contained on Punched Cards

The machine illustrated has four counters, permitting the simultaneous taking off of the data contained under four different headings on the punched card. The sorted cards are placed at the left of the tabulating machine and run through at the rate of about 3,000 per hour. Totals are read from the dials shown at the right

Source: [1],p.323; click image to enlarge.

The Hollerith Type 1 Tabulator, numeric only, 1906. After having automated the 1890 US census with his tabulating and associated machines (punch, sorter), Herman Hollerith formed The Tabulating Machine Company in 1896, using the trade name *Hollerith* for its products. The Type 1 tabulator was its second product, after the 1901 Automatic Horizontal Sorter. The Type 1 was the first to have an integrated card reader, and the first to allow some degree of programmability via an integrated wiring panel.

Wiring panel; *Photo:* [103] - click to enlarge.

From [1]: "The cards are placed in the machine at the left and are fed through automatically, one by one, so that electric contacts are made wherever there are holes punched in the card. The electric contacts cause the counting dials to revolve by just the right amount to record properly the data punched for each hole. After any group of cards has been run through the machine the totals can be read off from the counting dials and written down by the operator. Then the machine is ready for some other set of cards ... By having several counting heads on the same machine, different sets of information may be taken from the cards simultaneously, thus frequently permitting one run of the cards through a tabulating machine to give all the data which may be required."

From [1], p.323: "Fig.231 gives a view of a completely equipped office for the use of the punched-card system by an electric lighting company. The data are transferred from the original records to the cards by very simple punching machines wiith keys somewhat similar to typewriter keys. The punching is usually done girls. A little training and practice gives high speed.

Once punched, the cards are always available and may be filed for record purposes. It is frequently a great convenience to be able to run through the machines cards for several years back so that comparative statistics may be made. The preservation of the cards makes in unnecessary to dig out the original records. The uniform size of the cards makes it possible to preserve large quantities of them with comparatively little labor."

A tabulating office in 1914. "The girls at left are operating the key punches ... A gang punch is shown on the table at extreme right. In the corner is the card-sorting machine, and the tabulating machine is in the center. files for punched cards are seen along the wall."

References:

1. Willard C. Brinton, *Graphic Methods for Presenting Facts*, The Engineering Magazine Company, New York (Copyright 1914).

2. Austrian, Geoffrey, *Herman Hollerith: Forgotten Giant of Information Processing*, Columbia University Press (1982).

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